API Well Number: 43041500120000

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 3

AMENDED REPORT ☑

APPLICATION FOR PERMIT TO DRILL

1. WELL NAME and NUMBER
Trans-Western Petroleum USG #2

2. TYPE OF WORK
DRILL NEW WELL ◉ REENTER P&A WELL ○ DEEPEN WELL ○

3. FIELD OR WILDCAT
WILDCAT

4. TYPE OF WELL
Oil Well Coalbed Methane Well: NO

5. UNIT or COMMUNITIZATION AGREEMENT NAME

6. NAME OF OPERATOR
TRANS-WESTERN PETROLEUM, LTD., INC.

7. OPERATOR PHONE
303 279-4567

8. ADDRESS OF OPERATOR
P.O. Box 276, Golden, CO, 80402

9. OPERATOR E-MAIL
dougisern@gmail.com

10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE)
FEE

11. MINERAL OWNERSHIP
FEDERAL ○ INDIAN ○ STATE ○ FEE ◉

12. SURFACE OWNERSHIP
FEDERAL ○ INDIAN ○ STATE ○ FEE ◉

13. NAME OF SURFACE OWNER (if box 12 = 'fee')
United States Gypsum Company

14. SURFACE OWNER PHONE (if box 12 = 'fee')
4358962401

15. ADDRESS OF SURFACE OWNER (if box 12 = 'fee')
550 W Adams St, Chicago, IL 60661

16. SURFACE OWNER E-MAIL (if box 12 = 'fee')
ballen@usg.com

17. INDIAN ALLOTTEE OR TRIBE NAME (if box 12 = 'INDIAN')

18. INTEND TO COMMINGLE PRODUCTION FROM MULTIPLE FORMATIONS
YES ○ (Submit Commingling Application) NO ◉

19. SLANT
VERTICAL ○ DIRECTIONAL ◉ HORIZONTAL ○

20. LOCATION OF WELL	FOOTAGES	QTR-QTR	SECTION	TOWNSHIP	RANGE	MERIDIAN
LOCATION AT SURFACE	1555 FNL 2003 FWL	NENW	23	22.0 S	1.0 W	S
Top of Uppermost Producing Zone	2548 FNL 852 FWL	SWNW	23	22.0 S	1.0 W	S
At Total Depth	2548 FNL 852 FWL	SWNW	23	22.0 S	1.0 W	S

21. COUNTY
SEVIER

22. DISTANCE TO NEAREST LEASE LINE (Feet)
852

23. NUMBER OF ACRES IN DRILLING UNIT
40

25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed)
1961

26. PROPOSED DEPTH
MD: 7748 TVD: 7400

27. ELEVATION - GROUND LEVEL
5865

28. BOND NUMBER
025934539

29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE
Salina City culinary

Hole, Casing, and Cement Information

String	Hole Size	Casing Size	Length	Weight	Grade & Thread	Max Mud Wt.	Cement	Sacks	Yield	Weight
SURF	12.25	9.625	0 - 2003	36.0	K-55 ST&C	9.2	Halliburton Light , Type Unknown	270	3.48	11.0
							Class G	268	1.17	15.8
PROD	8.75	5.5	0 - 7748	17.0	L-80 LT&C	10.5	Halliburton Light , Type Unknown	360	3.48	11.0
							Class G	550	1.17	15.8

ATTACHMENTS

VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES

- ☑ WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER
- ☑ COMPLETE DRILLING PLAN
- ☑ AFFIDAVIT OF STATUS OF SURFACE OWNER AGREEMENT (IF FEE SURFACE)
- ☐ FORM 5. IF OPERATOR IS OTHER THAN THE LEASE OWNER
- ☑ DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY DRILLED)
- ☑ TOPOGRAPHICAL MAP

NAME John C. Magill | **TITLE** Consulting Engineer | **PHONE** 308 848-3279

SIGNATURE | **DATE** 10/01/2014 | **EMAIL** oakbrook@gpcom.net

API NUMBER ASSIGNED
43041500120000

APPROVAL

Permit Manager

RECEIVED: December 11, 2014

Trans-Western Petroleum, LTD

Drilling Plan

Trans-Western Petroleum USG #2

Surface Location: Lot 6 NW/4 (NE/4 NW/4) Section 23, Township 22 South, Range 1 West, S.L.B. & M.
Sevier County, Utah

Plan Summary:

It is planned to drill this confidential exploratory well as a directional bore hole due to surface topography constraints and in accordance with the attached directional drilling plan. The well will be drilled to a measured depth of 7748 ft MD (7400 ft TVD) to test the Twin Creek and Navajo formations. Well path deviation (outside the planned well path) caused by subsurface geologic irregularities is expected to be the primary drilling concern in this area. No abnormal pressure is anticipated.

The planned coordinates follow:

Surface location	1555' FNL/2003' FWL-Sec. 23-T22S-R1W, S.L.B.&M.
@ Navajo target	2548' FNL/852' FWL-Sec. 23-T22S-R1W, S.L.B.&M.
BHL @ TD	2548' FNL/852' FWL-Sec. 23-T22S-R1W, S.L.B.&M.

Conductor casing will be set at approximately 105 ft GL and cemented to surface. A 12-1/4" hole will be drilled vertically to KOP at approximately 1400 ft DF. From KOP, inclination will be increased at 1.5 degrees/100 feet to 9 degrees at 2003 ft MD (200 ft TVD) where 9-5/8" surface casing will be set and cemented to surface. An 8-3/4" hole will be drilled below the surface casing. 8-3/4" hole will continue to build angle at 1.5 degrees/100 feet to final inclination of 30 degrees at 3400 ft MD (3310 ft TVD). The inclination will be held at 30 degrees to a depth of approximately 4923 ft MD (4629 ft TVD) and then allowed to drop at 2.5 degrees/100 feet to vertical at 6122 ft MD (5774 ft TVD) near the top of the Twin Creek formation (6126 ft MD, 5778 ft TVD). The well bore will be vertical when penetrating the Twin Creek and Navajo formations. The well is expected to be drilled to a total depth of 7748 ft MD (7400 ft TVD) where logs will be

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run in the open hole. 5-1/2" production casing will be set and cemented if justified by the drilling/evaluation results.

Drilling activities at this well are expected to commence in November 2014.

Well Name:	Trans-Western Petroleum USG #2
Surface Location:	1555' FNL, 2003' FWL, Lot 6 NW/4 (NE/4 NW/4) Section 23, T22S, R1W, S.L.B.&M., Sevier County
TD Bottom-hole location:	2548' FNL, 852' FWL, Lot 12 NW/4 (SW/4 NW/4) Section 23, T22S, R1W, S.L.B.&M.
Elevation:	5865' GL, 5883' DF (18' DF-GL)

1. **Geology:**

Tops of important geologic markers and anticipated water, oil, gas and mineral content are as follows:

Formation	TVD Interval (DF)	MD Interval (DF)	Contents	Pressure Gradient
Arapien	18'-5778'	18'-6126'		
Twin Creek	5778'-6163'	6126'-6511'	Oil & water	0.433 psi/ft
Navajo 1	6163'-6353'	6511'-6701'		
High Gamma	6353'-6393'	6701'-6741'		
Navajo 2	6393'-7400'	6741'-7748'	Oil & water	0.433 psi/ft
Total Depth	7400'	7748'		

2. Well Control

A rotating head will be installed on the conductor casing to divert any unexpected flow away from the well.

The contracted drilling rig is expected to have a 3000 psi rated BOP system which will satisfy the anticipated pressure requirements. BOPE will be in place and tested prior to drilling out the surface casing shoe. See attached schematic of the BOPE.

A. **The BOPE** will, as a minimum, include the following:

SRRA Wellhead Equipment (3M rating minimum)

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BOPE Item	Flange Size and Minimum Rating
Annular Preventer	11" 3M
Double Rams (4½" or 5" top, blind bottom)	11" 3M
Drilling Spool w/ 2 side outlets (3" min. choke side, 2" min. kill side)	11" 3M
Casing head (11" x 9⅝ SOW w/ 2 ea. 2-1/16" SSO's)	11" 3M

Auxiliary Equipment (3M minimum rating)

BOPE Item
3" diameter choke line with 2 ea. valves (3 inch minimum)
2" kill line with 2 ea. 2" kill line valves (one of which will be a check valve)
2 ea chokes with one remotely controlled at a location readily accessible to the driller
Upper kelly cock valve with handle available
Safety valves and subs to fit all drill string connections in use
Inside BOP or float sub
Pressure gauge on choke manifold
All BOPE connections subjected to well pressure to be flanged, welded or clamped
Fill-up line above the uppermost preventer
Wear bushing in the casing head

B. **Choke manifold** will be functionally equipped and sized at a minimum as shown on the attached diagram. All choke lines will be straight lines unless turns have tee blocks or are targeted with running tees and all choke lines will be anchored. All valves (except chokes) in the kill line, choke manifold and choke line will be full opening and allow straight through flow.

C. **System accumulator** will have sufficient capacity to open the hydraulically-controlled gate valve and close all rams plus the annular preventer and retain a minimum pressure of 200 psi above precharge on the closing manifold without use of the closing unit pumps. The fluid reservoir capacity will be double the usable fluid volume of the accumulator system capacity and the fluid level of the reservoir will be maintained at the manufacturer's recommendations. Two independent sources of power will be available for powering the closing unit pumps. Sufficient

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nitrogen bottles are suitable as a backup power source only, and shall be recharged when the pressure falls below manufacturer's specifications.

D. **Accumulator pre-charge pressure test** will be conducted prior to connecting the closing unit to the BOP stack and at least once every six months. The accumulator pressure will be corrected if the measured precharge pressure is found to be above or below the maximum or minimum specified limits. Only nitrogen gas will be used to precharge.

E. **Power for the closing unit pumps** will be available to the unit at all times so that the pumps will automatically start when the closing unit manifold pressure has decreased to the pre-set level.

F. **Accumulator pump capacity** will be such that, with the accumulator system isolated from service, the pumps will be capable of opening the hydraulically-operated gate valve, plus closing the annular preventer on the smallest size drill pipe to be used within two minutes, and retaining a minimum of 200 psi above the specified accumulator pre-charge pressure.

G. **Locking devices**, either manual (i.e. hand wheels) or automatic, will be installed on the ram type preventers.

H. **Remote controls** will be readily accessible to the driller and will be capable of initiating and maintaining both opening and closing of all preventers. Master controls will be at the accumulator and will be capable of opening and closing all preventers and the choke line valve.

I. **Well control equipment testing** will be performed using clear water when the equipment is initially installed, whenever any seal subject to test pressure is broken, following related repairs and as a minimum, every 30 day interval. The tests will apply to all related well control equipment.
Ram type preventers and associated equipment will be isolated and tested to 3000 psi. The annular preventer will be tested to 1500 psi. Pressure will be maintained for at least 10 minutes or until requirements of the test are met, whichever is longer, for all tests. A casing head valve will be open below the test plug during testing of the BOP stack. Valves will be tested from the working pressure side with all down-stream valves open. Kill line valves will be tested with the check valve held open (unless it is the check valve that is being tested) and any ball valve (outside of the valve being tested) in the open position so that any leak in the valve being tested can be observed.

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Pipe and blind rams will be activated each trip, but not more than once a day. The annular preventer will be functionally operated at least weekly. A pit level drill will be conducted, at a minimum, weekly for each crew. All BOPE drills and tests will be recorded in the IADC drillers' log.

3. Casing and Cementing

A. Casing Program (all new or inspected to new standards casing)

Hole Size (in)	Casing Size (in)	Weight (lb/ft)	Grade	Conn.	Coupling Diameter	Setting Depth
17-1/2	13-3/8	48	H-40	STC	14-3/8	105' GL
12¼	9⅝	36	J55	STC	10⅝"	2000' TVD DF
8¾	5½	17	L-80	LTC	6.05"	7400' TVD DF

	Surface	Production
Casing OD	9.625	5.5
Casing grade	J55	L80
Weight of pipe (lb/ft)	36.0	17.0
Connection	STC	LTC
Top setting depth – MD (ft)	0	0
Top setting depth – TVD (ft)	0	0
Bottom setting depth MD (ft)	2003	7748
Bottom setting depth TVD (ft)	2000	7400
Maximum mud weight – Inside (ppg)	10.5*	10.5*
Maximum pore pressure – Inside (ppg)	8.34	8.34
Maximum mud weight – Outside (ppg)	9.2	10.5*
Maximum pore pressure – Outside (ppg)	8.34	8.34
Design cement top – MD (ft)	18 (0 GL)	1500
Design cement top – TVD (ft)	18 (0 GL)	1500
Max. hydrostatic pressure inside w/ dry outside (psi)	956[1]	4036[6]
Casing burst rating (psi)	3520	7740
Burst Design Factor (1.10 minimum)	3.68[2]	1.92[7]
Max. hydrostatic outside w/ dry inside (psi)	956[1]	4036[6]
Casing collapse rating (psi)	2020	6290
Collapse Design Factor (1.125 minimum)	2.11[3]	1.56[8]
Casing weight in air (kips)	72.0[4]	125.8[9]

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Body yield strength (kips)	564	397
Joint strength (kips)	394	338
Tension Design Factor (1.80 minimum)	5.47[5]	2.69[10]

*Due to salt saturated mud used to prevent washouts in salt (halite) zones

Casing with the same or greater burst, collapse and tension rating may be substituted for any of the planned casings depending on availability and actual conditions.

[1] $P = \frac{2000}{19.25} \times 9.2 = 956\ psi$

[2] $DF_b = \frac{3520}{956} = 3.68$

[3] $DF_c = \frac{2020}{956} = 2.11$

[4] $W = 36\frac{lb}{ft} \times 2000ft \times \frac{kip}{1000lb} = 72\ kips$

[5] $DF_t = \frac{394}{72} = 5.47$

[6] $P = \frac{7400}{19.25} \times 10.5 = 4036\ psi$

[7] $DF_b = \frac{7740}{4036} = 1.92$

[8] $DF_c = \frac{6290}{4036} = 1.56$

[9] $W = 17\frac{lb}{ft} \times 7400ft \times \frac{kip}{1000lb} = 125.8\ kips$ (air weight, neglect buoyancy)

[10] $DF_t = \frac{338}{125.8} = 2.69$

B. Cementing Program

Casing size	Cement slurry	Quantity (sx)	Density (ppg)	Yield (cf/sk)	Excess Factor
9⅝"	Lead: extended cement	270[1]	11.0	3.48	2.0
	Tail: Cl. G or Premium to 1500'	269[2]	15.8	1.17	2.0
5½"	Lead: extended cement	360[3]	11.0	3.48	1.2
	Tail: Cl. G or Prem. to 5278'TVD	550[4]	15.8	1.17	1.2

[1] $v = (1500 - 0)\frac{\pi}{4}(12.25^2 - 9.625^2)\left(\frac{1}{144}\right)(2.0)\left(\frac{1}{3.48}\right) = 270$ sx

[2] $v = (2003 - 1500)\frac{\pi}{4}(12.25^2 - 9.625^2)\left(\frac{1}{144}\right)(2.0)\left(\frac{1}{1.17}\right) = 269$ sx

[3] $v = (5626 - 1500)\frac{\pi}{4}(8.75^2 - 5.5^2)\left(\frac{1}{144}\right)(1.2)\left(\frac{1}{3.48}\right) = 359$ sx

[4] $v = (7748 - 5626)\frac{\pi}{4}(8.75^2 - 5.5^2)\left(\frac{1}{144}\right)(1.2)\left(\frac{1}{1.17}\right) = 550$ sx

Surface: 9⅝" surface casing will be cemented from setting depth (2000' DF) to GL and topped off with neat cement if necessary. Hardware will include a self fill float shoe, self fill float collar, top cementing plug and a minimum of one

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centralizer per joint on the bottom three (3) casing joints. Water or other preflush fluid, pumped ahead of the slurry, will separate cement from the drilling fluid.

Production: 5½" production casing will be cemented in one stage from setting depth (7400' TVD) to 1500' TVD (500' inside the surface casing) using light weight lead cement and neat tail cement (neat tail cement across the producing interval from TD to 500' above the top of the Twin Creek formation). If measured BHT exceeds 230°F, silica flour will be added to the tail slurry to provide temperature induced cement strength degradation resistance. Slurry volume will be based on calipered hole size plus 20% excess. Hardware will include a self fill-up float shoe, self fill-up float collar, and bottom & top cementing plugs. Centralizers will be placed as needed across any pay zones and massive salt zones. Salt water and preflush fluid pumped ahead of the slurry will separate cement from the drilling fluid.

Other: - UDOGM will be notified at least twenty-four hours prior to running and cementing the surface and production casing strings.

- Actual cement slurries for all casing will be based on final service company recommendations.

- The size, weight, grade, type of thread, number of joints and footage of all casing run will be recorded in the drillers' log, the IADC report sheet. The amount and type of all cement pumped will be recorded in the drillers' log, the IADC report sheet.

- Surface casing string will be tested to 1500 psi before drilling out and if pressure declines by more than10% in 30 minutes corrective action will be taken.

- For the surface casing string, adequate time will be allowed to achieve a minimum 500 psi compressive strength before drilling out the cement at the surface casing shoe.

- Before drilling more than 20 feet of new hole below the surface casing shoe a pressure integrity test of the casing shoe will be performed to a minimum of the mud weight equivalent anticipated to control the pore pressure at total depth of the well.

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4. Mud Program

Depth Interval (TVD)	Mud Weight (ppg)	Mud Type	Viscosity	Fluid Loss
0 – 2000'	8.4 – 9.2	Low solids, non-dispersed, fresh water mud	26 – 50	N/C to 12 cc
2000' – TD	9.2 – 10.5	Salt saturated	36 – 50	N/C to 4 cc

A. After mudding up, slow pump rates will be taken daily and recorded in the drillers' log.
B. Visual mud monitoring equipment will be in place to detect volume changes indicating loss or gain of circulating fluid volume.
C. Abnormal pressure is not anticipated. For the production hole, in the event such pressure is encountered electro-mechanical mud monitoring equipment will be in place and include as a minimum: pit volume totalizer (PVT), stroke counter and flow line flow sensor.
D. A mud test will be performed, as a minimum, every 24 hours after mudding up to determine: density, viscosity, gel strength, filtration and pH.
E. Use of the trip tank is not anticipated for this well.
F. For the production hole, gas detecting equipment will be installed in the mud return system prior to penetrating the Twin Creek formation and hydrocarbon gas shall be monitored for pore pressure changes. The presence of hydrogen sulfide gas is not expected but appropriate precautions will be taken in the event that it is encountered.
G. The need to vent combustible or noncombustible gas is not expected. For the production hole, a flare system designed to gather and burn all gas will be available. The flare line discharge will be located at approximately 150 feet from the wellhead (Utah regulation minimum of 150'). The flare line is intended to have straight lines. Required turns will be through targeted tees. The line will be anchored along its length from the choke house/gas buster to the flare pit. The flare outlet will have an effective ignition mechanism.

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H. Abnormal pressure is not expected. Nevertheless, a mud gas separator (gas buster) will be installed and operable beginning at a point 500 feet above the Twin Creek formation.

5. Evaluation

A. Mud Log: A mud logging unit will be in operation from a depth of approximately 4000 feet to TD. Samples well be caught, cleaned, cataloged and marked as required.

B. Drill Stem Tests: There are no DST's planned.

C. Coring: There are no cores planned.

D. Wireline logs: Wireline logs will be run as hole conditions allow from TD to surface casing shoe to assist in determining lithology and potential for hydrocarbon recovery. The logging tools will, at a minimum, survey resistivity, gamma radiation and sonic velocity.

6. Expected Bottom-hole pressure and abnormal conditions

A. Hydrogen sulfide: The presence of hydrogen sulfide (H_2S) gas is unlikely. However, there is a possibility of encountering H_2S in or below the Twin Creek formation. Appropriate safety procedures are to be in place before penetrating the Twin Creek formation.

B. Abnormal pressure: No abnormal pressured zones are expected in this well. The pressure gradient for all potentially productive formations is expected to be 0.433 psi/ft or less.

C. Temperature: Bottom-hole temperature at 2000 ft is expected to be approximately 109°F. Bottom-hole temperature at TD is expected to be approximately 223°F.

end

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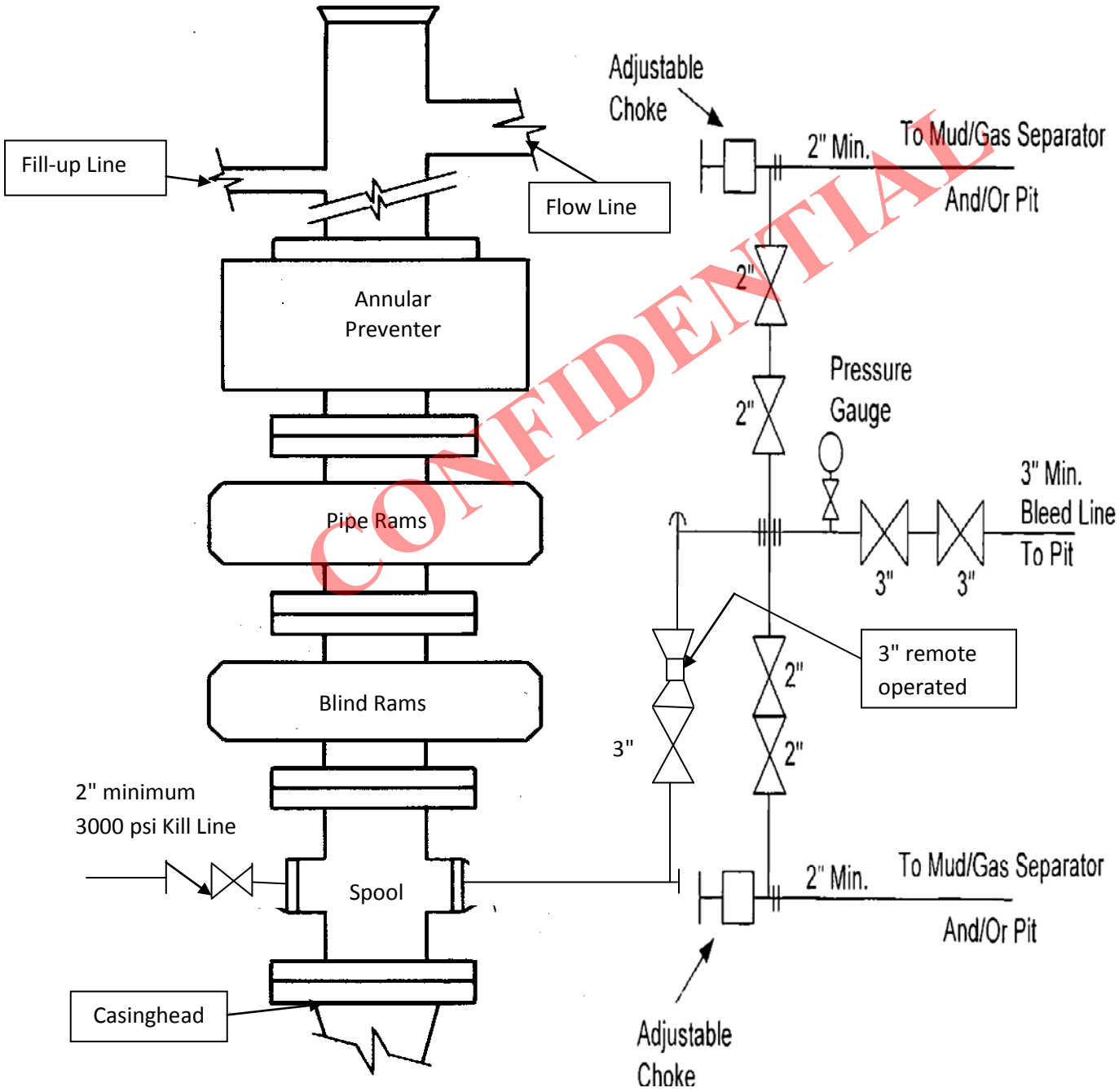
Trans-Western Petroleum USG #2
BOPE Schematic



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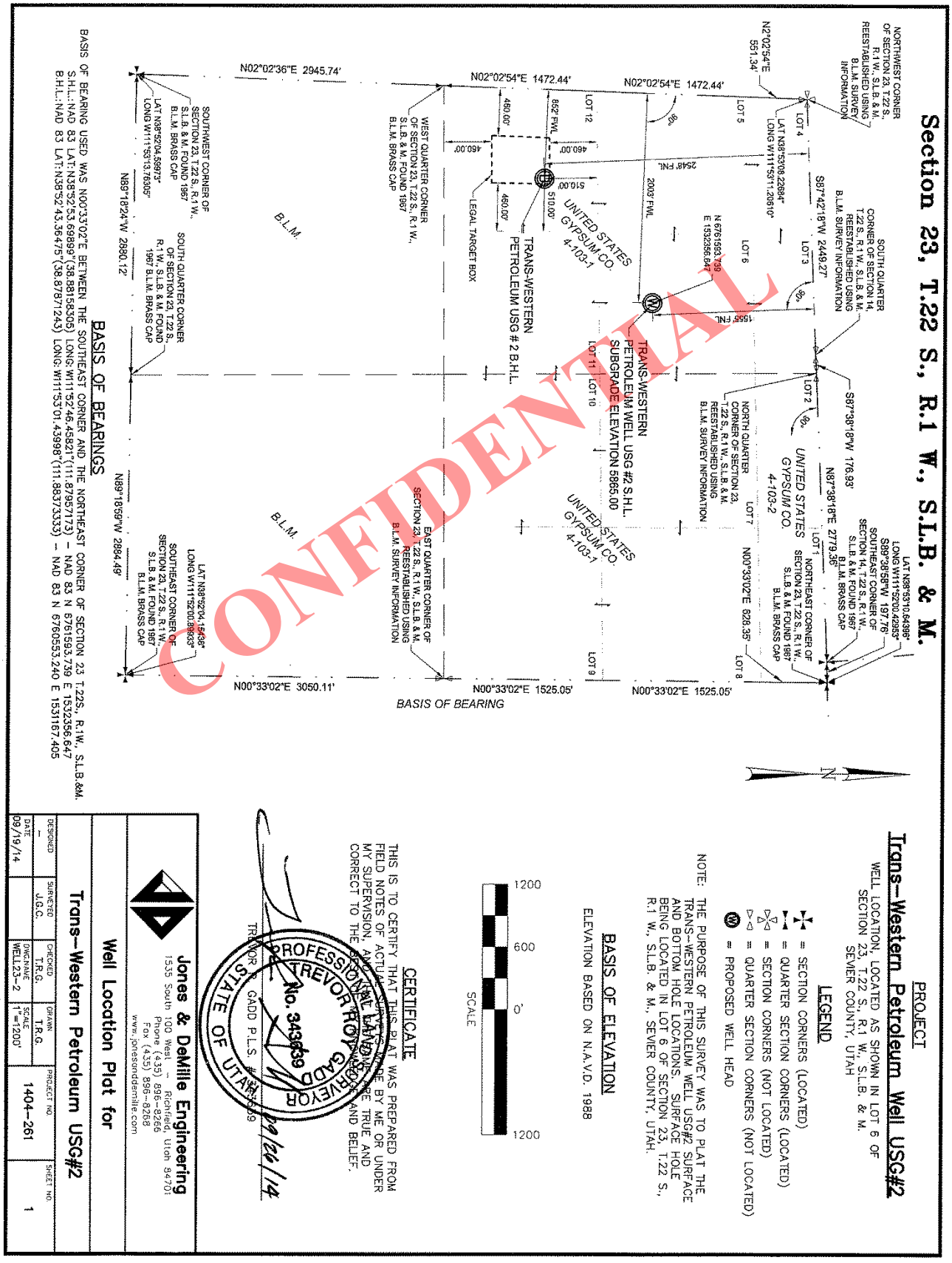
Trans-Western Petroleum, LTD
APD Drilling Program
Trans-Western Petroleum USG #2



BASIS OF BEARINGS

BASIS OF BEARING USED WAS N00°33'02"E BETWEEN THE SOUTHEAST CORNER AND THE NORTHEAST CORNER OF SECTION 23 T.22S., R.1W., S.L.B.&M.
S.H.L.: NAD 83 LAT: N38°52'53.69999"(38.88158305) LONG: W111°52'46.45821"(111.87957173) – NAD 83 N 6761593.739 E 1532356.647
B.H.L.: NAD 83 LAT: N38°52'45.36475"(38.87871243) LONG: W111°53'01.43998"(111.88373333) – NAD 83 N 6760553.240 E 1531167.405

PROJECT

Trans-Western Petroleum Well USG#2

WELL LOCATION, LOCATED AS SHOWN IN LOT 6 OF SECTION 23, T.22 S., R.1 W., S.L.B. & M. SEVIER COUNTY, UTAH

LEGEND

= SECTION CORNERS (LOCATED)
= QUARTER SECTION CORNERS (LOCATED)
= SECTION CORNERS (NOT LOCATED)
= QUARTER SECTION CORNERS (NOT LOCATED)
= PROPOSED WELL HEAD

NOTE: THE PURPOSE OF THIS SURVEY WAS TO PLAT THE TRANS-WESTERN PETROLEUM WELL USG#2 SURFACE AND BOTTOM HOLE LOCATIONS. SURFACE HOLE BEING LOCATED IN LOT 6 OF SECTION 23, T.22 S., R.1 W., S.L.B. & M., SEVIER COUNTY, UTAH.

BASIS OF ELEVATION

ELEVATION BASED ON N.A.V.D. 1988

CERTIFICATE

THIS IS TO CERTIFY THAT THIS PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION, AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

TREVOR R. GADD P.L.S. No. 343639 STATE OF UTAH PROFESSIONAL LAND SURVEYOR

9/24/14

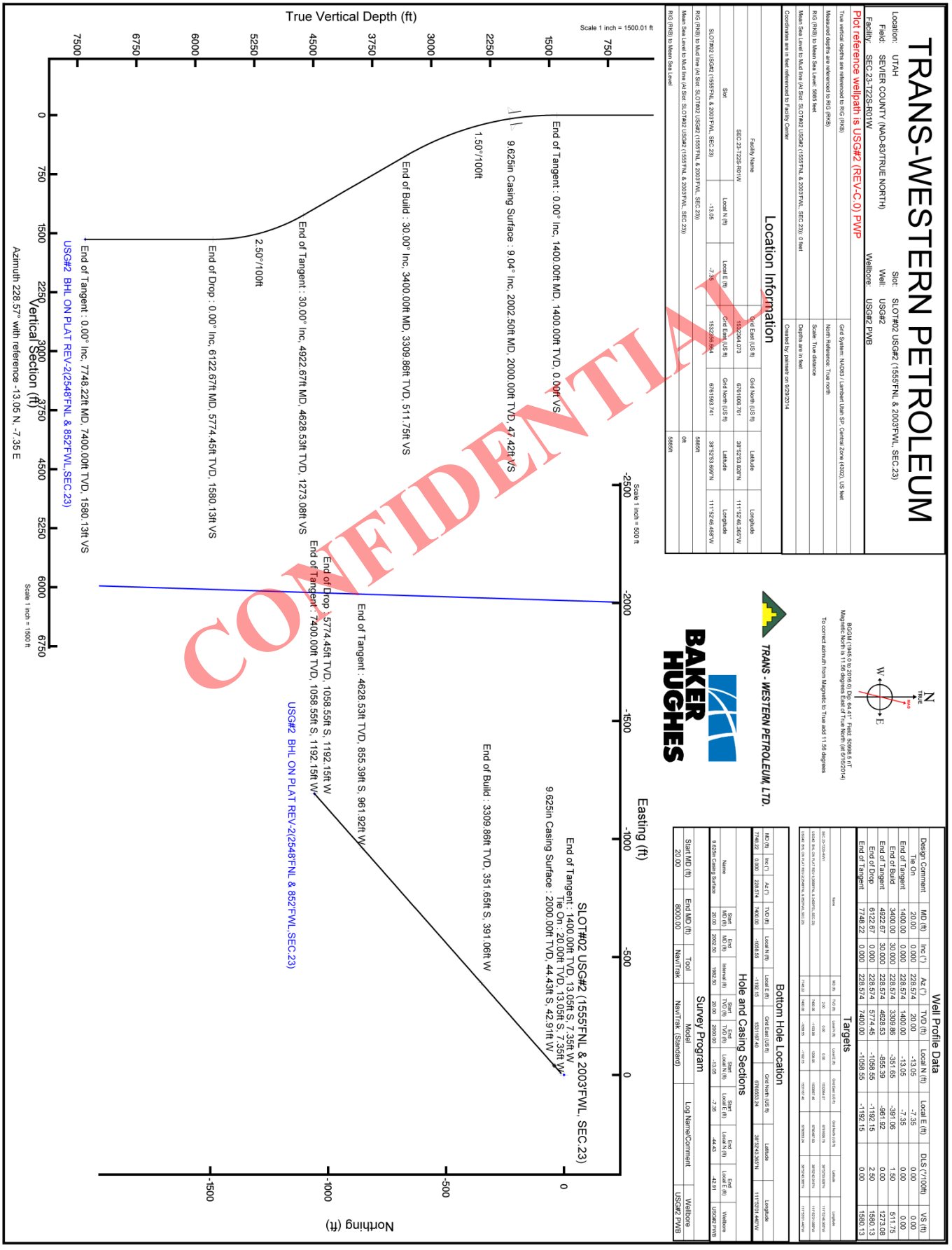
Jones & DeMille Engineering
1535 South 100 West – Richfield, Utah 84701
Phone (435) 896-8266
Fax (435) 896-8268
www.jonesanddemille.com

Well Location Plat for

Trans-Western Petroleum USG#2

DESIGNED	SURVEYED	CHECKED	DRAWN	PROJECT NO	SHEET NO
–	J.G.C.	T.R.G.	T.R.G.	1404-261	1
DATE 09/19/14	DWG NAME WELL23-2	SCALE 1"=1200'			

Trans-Western Petroleum, LTD
APD Drilling Program
Trans-Western Petroleum USG #2



Trans-Western Petroleum, LTD
APD Drilling Program
Trans-Western Petroleum USG #2

Planned Wellpath Report

USG#2 (REV-C.0) PWP

REFERENCE WELLPATH IDENTIFICATION			
Operator	**TRANS-WESTERN PETROLEUM**	Slot	**SLOT#02 USG#2 (1555'FNL & 2003'FWL, SEC.23)**
Area	**UTAH**	Well	**USG#2**
Field	**SEVIER COUNTY (NAD-83/TRUE NORTH)**	Wellbore	**USG#2 PWB**
Facility	**SEC.23-T22S-R01W**		

REPORT SETUP INFORMATION			
Projection System	**NAD83 / Lambert Utah SP, Central Zone (4302), US feet**	Software System	**WellArchitect® 4.0.0**
North Reference	**True**	User	**Painsetr**
Scale	**1.00004**	Report Generated	**9/29/2014 at 12:00:39 PM**
Convergence at slot	**n/a**	Database/Source file	**WA_Denver/USG#2_PWB.xml**

WELLPATH LOCATION	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	**East[ft]**	**Easting[US ft]**	**Northing[US ft]**	**Latitude**	**Longitude**
Slot Location	-13.05	-7.35	1532356.66	6761593.74	**38°52'53.699"N**	**111°52'46.458"W**
Facility Reference Pt			1532364.07	6761606.76	**38°52'53.828"N**	**111°52'46.365"W**
Field Reference Pt			1532364.07	6761606.77	**38°52'53.828"N**	**111°52'46.365"W**

WELLPATH DATUM			
Calculation method	**Minimum curvature**	RIG (RKB) to Facility Vertical Datum	**5885.00ft**
Horizontal Reference Pt	**Facility Center**	RIG (RKB) to Mean Sea Level	**5885.00ft**
Vertical Reference Pt	**RIG (RKB)**	RIG (RKB) to Mud Line at Slot (SLOT#02 USG#2 (1555'FNL & 2003'FWL, SEC.23))	**5885.00ft**
MD Reference Pt	**RIG (RKB)**	Section Origin	**N -13.05, E -7.35 ft**
Field Vertical Reference	**Mean Sea Level**	Section Azimuth	**228.57°**

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Trans-Western Petroleum, LTD
APD Drilling Program
Trans-Western Petroleum USG #2

Planned Wellpath Report

USG#2 (REV-C.0) PWP

REFERENCE WELLPATH IDENTIFICATION			
Operator	**TRANS-WESTERN PETROLEUM**	Slot	**SLOT#02 USG#2 (1555'FNL & 2003'FWL, SEC.23)**
Area	**UTAH**	Well	**USG#2**
Field	**SEVIER COUNTY (NAD-83/TRUE NORTH)**	Wellbore	**USG#2 PWB**
Facility	**SEC.23-T22S-R01W**		

WELLPATH DATA (84 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
0.00†	0.000	228.574	0.00	0.00	-13.05	-7.35	0.00	
20.00	0.000	228.574	20.00	0.00	-13.05	-7.35	0.00	Tie On
120.00†	0.000	228.574	120.00	0.00	-13.05	-7.35	0.00	
220.00†	0.000	228.574	220.00	0.00	-13.05	-7.35	0.00	
320.00†	0.000	228.574	320.00	0.00	-13.05	-7.35	0.00	
420.00†	0.000	228.574	420.00	0.00	-13.05	-7.35	0.00	
520.00†	0.000	228.574	520.00	0.00	-13.05	-7.35	0.00	
620.00†	0.000	228.574	620.00	0.00	-13.05	-7.35	0.00	
720.00†	0.000	228.574	720.00	0.00	-13.05	-7.35	0.00	
820.00†	0.000	228.574	820.00	0.00	-13.05	-7.35	0.00	
920.00†	0.000	228.574	920.00	0.00	-13.05	-7.35	0.00	
1020.00†	0.000	228.574	1020.00	0.00	-13.05	-7.35	0.00	
1120.00†	0.000	228.574	1120.00	0.00	-13.05	-7.35	0.00	
1220.00†	0.000	228.574	1220.00	0.00	-13.05	-7.35	0.00	
1320.00†	0.000	228.574	1320.00	0.00	-13.05	-7.35	0.00	
1400.00	0.000	228.574	1400.00	0.00	-13.05	-7.35	0.00	End of Tangent
1420.00†	0.300	228.574	1420.00	0.05	-13.09	-7.39	1.50	
1520.00†	1.800	228.574	1519.98	1.88	-14.30	-8.77	1.50	
1620.00†	3.300	228.574	1619.88	6.33	-17.24	-12.10	1.50	
1720.00†	4.800	228.574	1719.63	13.40	-21.91	-17.40	1.50	
1820.00†	6.300	228.574	1819.15	23.07	-28.31	-24.65	1.50	
1920.00†	7.800	228.574	1918.40	35.34	-36.43	-33.85	1.50	
2020.00†	9.300	228.574	2017.28	50.21	-46.27	-45.00	1.50	
2120.00†	10.800	228.574	2115.74	67.66	-57.82	-58.08	1.50	
2220.00†	12.300	228.574	2213.72	87.68	-71.06	-73.10	1.50	
2320.00†	13.800	228.574	2311.13	110.26	-86.00	-90.03	1.50	
2420.00†	15.300	228.574	2407.92	135.38	-102.63	-108.86	1.50	
2520.00†	16.800	228.574	2504.02	163.03	-120.92	-129.59	1.50	
2620.00†	18.300	228.574	2599.36	193.18	-140.87	-152.20	1.50	
2720.00†	19.800	228.574	2693.88	225.82	-162.47	-176.67	1.50	

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Trans-Western Petroleum, LTD
APD Drilling Program
Trans-Western Petroleum USG #2

Planned Wellpath Report

USG#2 (REV-C.0) PWP

REFERENCE WELLPATH IDENTIFICATION			
Operator	**TRANS-WESTERN PETROLEUM**	Slot	**SLOT#02 USG#2 (1555'FNL & 2003'FWL, SEC.23)**
Area	**UTAH**	Well	**USG#2**
Field	**SEVIER COUNTY (NAD-83/TRUE NORTH)**	Wellbore	**USG#2 PWB**
Facility	**SEC.23-T22S-R01W**		

WELLPATH DATA (84 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
2820.00†	21.300	228.574	2787.52	260.92	-185.69	-202.99	1.50	
2920.00†	22.800	228.574	2880.20	298.46	-210.53	-231.14	1.50	
3020.00†	24.300	228.574	2971.87	338.41	-236.97	-261.10	1.50	
3120.00†	25.800	228.574	3062.46	380.75	-264.98	-292.85	1.50	
3220.00†	27.300	228.574	3151.91	425.45	-294.55	-326.36	1.50	
3320.00†	28.800	228.574	3240.16	472.47	-325.67	-361.62	1.50	
3400.00	30.000	228.574	3309.86	511.75	-351.65	-391.06	1.50	End of Build
3420.00†	30.000	228.574	3327.18	521.75	-358.27	-398.56	0.00	
3520.00†	30.000	228.574	3413.78	571.75	-391.35	-436.05	0.00	
3620.00†	30.000	228.574	3500.38	621.75	-424.43	-473.54	0.00	
3720.00†	30.000	228.574	3586.99	671.75	-457.52	-511.03	0.00	
3820.00†	30.000	228.574	3673.59	721.75	-490.60	-548.52	0.00	
3920.00†	30.000	228.574	3760.19	771.75	-523.68	-586.01	0.00	
4020.00†	30.000	228.574	3846.80	821.75	-556.76	-623.51	0.00	
4120.00†	30.000	228.574	3933.40	871.75	-589.85	-661.00	0.00	
4220.00†	30.000	228.574	4020.00	921.75	-622.93	-698.49	0.00	
4320.00†	30.000	228.574	4106.60	971.75	-656.01	-735.98	0.00	
4420.00†	30.000	228.574	4193.21	1021.75	-689.09	-773.47	0.00	
4520.00†	30.000	228.574	4279.81	1071.75	-722.18	-810.96	0.00	
4620.00†	30.000	228.574	4366.41	1121.75	-755.26	-848.45	0.00	
4720.00†	30.000	228.574	4453.01	1171.75	-788.34	-885.94	0.00	
4820.00†	30.000	228.574	4539.62	1221.75	-821.43	-923.43	0.00	
4920.00†	30.000	228.574	4626.22	1271.75	-854.51	-960.92	0.00	
4922.67	30.000	228.574	4628.53	1273.08	-855.39	-961.92	0.00	End of Tangent
5020.00†	27.567	228.574	4713.83	1319.94	-886.40	-997.06	2.50	
5120.00†	25.067	228.574	4803.46	1364.27	-915.73	-1030.30	2.50	
5220.00†	22.567	228.574	4894.93	1404.65	-942.45	-1060.57	2.50	
5320.00†	20.067	228.574	4988.08	1441.00	-966.50	-1087.83	2.50	
5420.00†	17.567	228.574	5082.73	1473.25	-987.84	-1112.01	2.50	
5520.00†	15.067	228.574	5178.70	1501.34	-1006.42	-1133.07	2.50	

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Trans-Western Petroleum, LTD
APD Drilling Program
Trans-Western Petroleum USG #2

Planned Wellpath Report

USG#2 (REV-C.0) PWP

REFERENCE WELLPATH IDENTIFICATION			
Operator	**TRANS-WESTERN PETROLEUM**	Slot	**SLOT#02 USG#2 (1555'FNL & 2003'FWL, SEC.23)**
Area	**UTAH**	Well	**USG#2**
Field	**SEVIER COUNTY (NAD-83/TRUE NORTH)**	Wellbore	**USG#2 PWB**
Facility	**SEC.23-T22S-R01W**		

WELLPATH DATA (84 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
5620.00†	12.567	228.574	5275.80	1525.22	-1022.22	-1150.98	2.50	
5720.00†	10.067	228.574	5373.84	1544.85	-1035.21	-1165.69	2.50	
5820.00†	7.567	228.574	5472.65	1560.17	-1045.35	-1177.18	2.50	
5920.00†	5.067	228.574	5572.04	1571.17	-1052.63	-1185.43	2.50	
6020.00†	2.567	228.574	5671.81	1577.83	-1057.03	-1190.42	2.50	
6120.00†	0.067	228.574	5771.78	1580.13	-1058.55	-1192.15	2.50	
6122.67	0.000	228.574	5774.45	1580.13	-1058.55	-1192.15	2.50	End of Drop
6220.00†	0.000	228.574	5871.78	1580.13	-1058.55	-1192.15	0.00	
6320.00†	0.000	228.574	5971.78	1580.13	-1058.55	-1192.15	0.00	
6420.00†	0.000	228.574	6071.78	1580.13	-1058.55	-1192.15	0.00	
6520.00†	0.000	228.574	6171.78	1580.13	-1058.55	-1192.15	0.00	
6620.00†	0.000	228.574	6271.78	1580.13	-1058.55	-1192.15	0.00	
6720.00†	0.000	228.574	6371.78	1580.13	-1058.55	-1192.15	0.00	
6820.00†	0.000	228.574	6471.78	1580.13	-1058.55	-1192.15	0.00	
6920.00†	0.000	228.574	6571.78	1580.13	-1058.55	-1192.15	0.00	
7020.00†	0.000	228.574	6671.78	1580.13	-1058.55	-1192.15	0.00	
7120.00†	0.000	228.574	6771.78	1580.13	-1058.55	-1192.15	0.00	
7220.00†	0.000	228.574	6871.78	1580.13	-1058.55	-1192.15	0.00	
7320.00†	0.000	228.574	6971.78	1580.13	-1058.55	-1192.15	0.00	
7420.00†	0.000	228.574	7071.78	1580.13	-1058.55	-1192.15	0.00	
7520.00†	0.000	228.574	7171.78	1580.13	-1058.55	-1192.15	0.00	
7620.00†	0.000	228.574	7271.78	1580.13	-1058.55	-1192.15	0.00	
7720.00†	0.000	228.574	7371.78	1580.13	-1058.55	-1192.15	0.00	
7748.22	0.000	228.574	7400.00[1]	1580.13	-1058.55	-1192.15	0.00	End of Tangent

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Trans-Western Petroleum, LTD
APD Drilling Program
Trans-Western Petroleum USG #2

Planned Wellpath Report

USG#2 (REV-C.0) PWP

REFERENCE WELLPATH IDENTIFICATION			
Operator	**TRANS-WESTERN PETROLEUM**	Slot	**SLOT#02 USG#2 (1555'FNL & 2003'FWL, SEC.23)**
Area	**UTAH**	Well	**USG#2**
Field	**SEVIER COUNTY (NAD-83/TRUE NORTH)**	Wellbore	**USG#2 PWB**
Facility	**SEC.23-T22S-R01W**		

HOLE & CASING SECTIONS - Ref Wellbore: USG#2 PWB Ref Wellpath: USG#2 (REV-C.0) PWP

String/Diameter	Start MD [ft]	End MD [ft]	Interval [ft]	Start TVD [ft]	End TVD [ft]	Start N/S [ft]	Start E/W [ft]	End N/S [ft]	End E/W [ft]
9.625in Casing Surface	20.00	2002.50	1982.50	20.00	2000.00	-13.05	-7.35	-44.43	-42.91

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SEC.23-T22S-RW1		2.00	0.00	0.00	1532364.07	6761606.76	38°52'53.828"N	111°52'46.365"W	polygon
USG#2 BHL ON PLAT REV-1 (2699'FNL & 2409'FEL,SEC.23)		7400.00	-1103.98	1208.05	1533567.46	6760497.63	**38°52'42.916"N**	**111°52'31.089"W**	point
1) USG#2 BHL ON PLAT REV-2 (2548'FNL & 852'FWL,SEC.23)	7748.22	7400.00	-1058.55	-1192.15	1531167.40	6760553.24	**38°52'43.365"N**	**111°53'01.440"W**	point

SURVEY PROGRAM - Ref Wellbore: USG#2 PWB Ref Wellpath: USG#2 (REV-C.0) PWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
20.00	8000.00	NaviTrak (Standard)		USG#2 PWB

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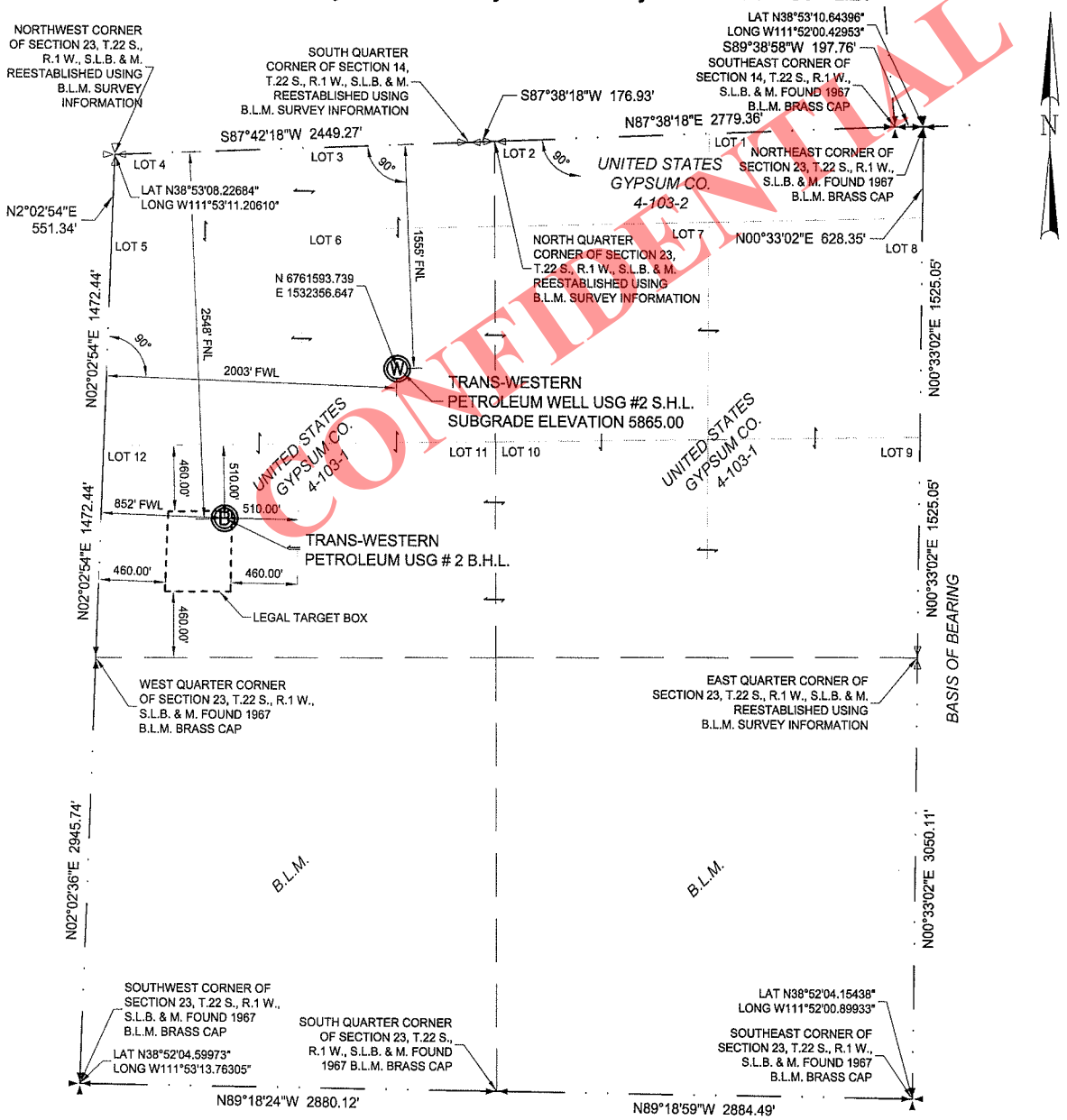
API Well Number: 43041500120000

Section 23, T.22 S., R.1 W., S.L.B. & M.



BASIS OF BEARINGS

BASIS OF BEARING USED WAS N00°33'02"E BETWEEN THE SOUTHEAST CORNER AND THE NORTHEAST CORNER OF SECTION 23 T.22S., R.1W., S.L.B.&M.
S.H.L.: NAD 83 LAT: N38°52'53.69899"(38.88158305) LONG: W111°52'46.45821"(111.87957173) – NAD 83 N 6761593.739 E 1532356.647
B.H.L.: NAD 83 LAT: N38°52'43.36475"(38.87871243) LONG: W111°53'01.43998"(111.88373333) – NAD 83 N 6760553.240 E 1531167.405

PROJECT

Trans–Western Petroleum Well USG#2

WELL LOCATION, LOCATED AS SHOWN IN LOT 6 OF SECTION 23, T.22 S., R.1 W., S.L.B. & M. SEVIER COUNTY, UTAH

LEGEND

= SECTION CORNERS (LOCATED)
= QUARTER SECTION CORNERS (LOCATED)
= SECTION CORNERS (NOT LOCATED)
= QUARTER SECTION CORNERS (NOT LOCATED)
= PROPOSED WELL HEAD

NOTE: THE PURPOSE OF THIS SURVEY WAS TO PLAT THE TRANS–WESTERN PETROLEUM WELL USG#2 SURFACE AND BOTTOM HOLE LOCATIONS. SURFACE HOLE BEING LOCATED IN LOT 6 OF SECTION 23, T.22 S., R.1 W., S.L.B. & M., SEVIER COUNTY, UTAH.

BASIS OF ELEVATION

ELEVATION BASED ON N.A.V.D. 1988

1200 600 0' 1200

SCALE

CERTIFICATE

THIS IS TO CERTIFY THAT THIS PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION, AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

PROFESSIONAL LAND SURVEYOR TREVOR ROY GADD No. 343639 STATE OF UTAH

09/26/14

TREVOR R. GADD P.L.S. # 343639

Jones & DeMille Engineering
1535 South 100 West – Richfield, Utah 84701
Phone (435) 896–8266
Fax (435) 896–8268
www.jonesanddemille.com

Well Location Plat for

Trans–Western Petroleum USG#2

DESIGNED	SURVEYED	CHECKED	DRAWN	PROJECT NO.	SHEET NO.
–	J.G.C.	T.R.G.	T.R.G.	1404–261	1
DATE		DWG.NAME	SCALE		
09/19/14		WELL23–2	1"=1200'		

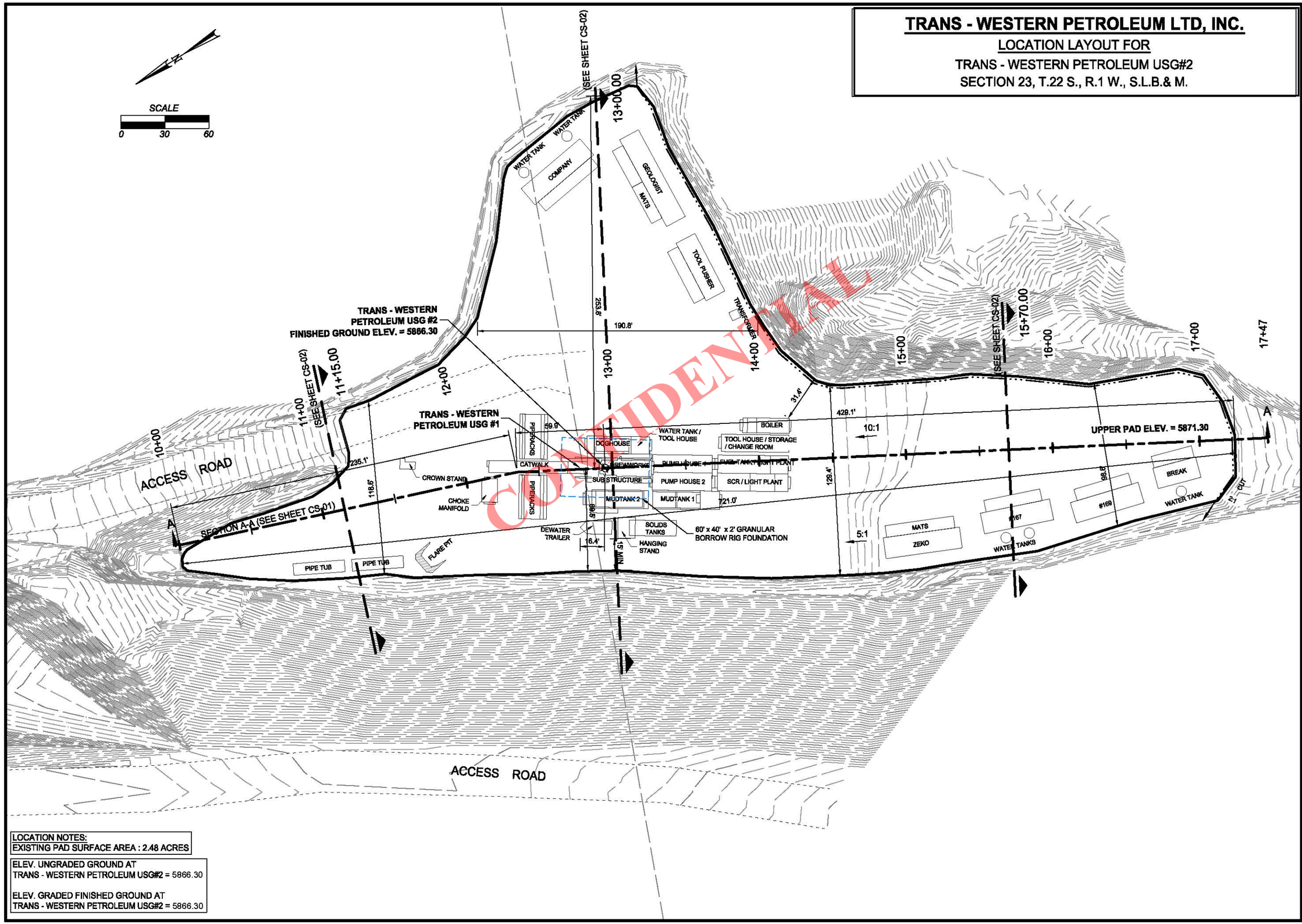
API Well Number: 43041500120000

TRANS - WESTERN PETROLEUM LTD, INC.

LOCATION LAYOUT FOR

TRANS - WESTERN PETROLEUM USG#2
SECTION 23, T.22 S., R.1 W., S.L.B.& M.

SCALE
0 30 60



LOCATION NOTES:
EXISTING PAD SURFACE AREA : 2.48 ACRES

ELEV. UNGRADED GROUND AT
TRANS - WESTERN PETROLEUM USG#2 = 5866.30

ELEV. GRADED FINISHED GROUND AT
TRANS - WESTERN PETROLEUM USG#2 = 5866.30

NO.	DATE	REMARKS
	DESIGN REV. BY:	ORIGINAL SUBMISSION FOR AUTHORIZATION
	MAPS CORR. BY:	
	PARCELS AFFECTED	
	REQUEST BY	

REVISIONS

SCALE: 1" = 60'
DWG NAME: DESIGN_23-2
SHT SET: ####
DWG CREATED: 2014/09/19
PEN TBL: 14to24-c2800.ctb
UPDATED: 9/18/2014
PLOTTED: 9/22/2014

Jones & DeMille Engineering, Inc.
CIVIL ENGINEERING - SURVEYING - GIS - ENVIRONMENTAL
1.800.748.5275 www.jonesanddemille.com

REVIEW
DATE:
BY:

DESIGN:
DRAWN: B.L. 14-09
CHECK:
QUANT:

APPROVAL RECOMM: DATE
PROJECT DESIGN ENGINEER
APPROVED: DATE

Trans-Western Petroleum LTD, Inc.
Trans-Western Petroleum USG #2 WELL
LOCATION EXHIBIT
PROJECT NUMBER: 1404-261

SEVIER
COUNTY
SHEET NO. SP-01

API Well Number: 43041500120000

TRANS-WESTERN PETROLEUM

Location: UTAH
Field: SEVIER COUNTY (NAD-83/TRUE NORTH)
Facility: SEC.23-T22S-R01W

Slot: SLOT#02 USG#2 (1555'FNL & 2003'FWL, SEC.23)
Well: USG#2
Wellbore: USG#2 PWB

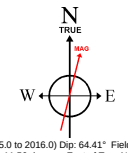
Plot reference wellpath is USG#2 (REV-C.0) PWP

True vertical depths are referenced to RIG (RKB)	Grid System: NAD83 / Lambert Utah SP, Central Zone (4302), US feet
Measured depths are referenced to RIG (RKB)	North Reference: True north
RIG (RKB) to Mean Sea Level: 5885 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#02 USG#2 (1555'FNL & 2003'FWL, SEC.23)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Facility Center	Created by: painsetr on 9/29/2014

Location Information

Facility Name			Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SEC.23-T22S-R01W			1532364.073	6761606.761	38°52'53.828"N	111°52'46.365"W
Slot	**Local N (ft)**	**Local E (ft)**	**Grid East (US ft)**	**Grid North (US ft)**	**Latitude**	**Longitude**
SLOT#02 USG#2 (1555'FNL & 2003'FWL, SEC.23)	-13.05	-7.35	1532356.664	6761593.741	38°52'53.699"N	111°52'46.458"W

RIG (RKB) to Mud line (At Slot: SLOT#02 USG#2 (1555'FNL & 2003'FWL, SEC.23))	5885ft
Mean Sea Level to Mud line (At Slot: SLOT#02 USG#2 (1555'FNL & 2003'FWL, SEC.23))	0ft
RIG (RKB) to Mean Sea Level	5885ft



BGGM (1945.0 to 2016.0) Dip: 64.41° Field: 50998.5 nT
Magnetic North is 11.56 degrees East of True North (at 6/16/2014)

To correct azimuth from Magnetic to True add 11.56 degrees

TRANS - WESTERN PETROLEUM, LTD.

BAKER HUGHES

Well Profile Data

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	20.00	0.000	228.574	20.00	-13.05	-7.35	0.00	0.00
End of Tangent	1400.00	0.000	228.574	1400.00	-13.05	-7.35	0.00	0.00
End of Build	3400.00	30.000	228.574	3309.86	-351.65	-391.06	1.50	511.75
End of Tangent	4922.67	30.000	228.574	4628.53	-855.39	-961.92	0.00	1273.08
End of Drop	6122.67	0.000	228.574	5774.45	-1058.55	-1192.15	2.50	1580.13
End of Tangent	7748.22	0.000	228.574	7400.00	-1058.55	-1192.15	0.00	1580.13

Targets

Name	MD (ft)	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SEC.23-T22S-RW1		2.00	0.00	0.00	1532364.07	6761606.76	38°52'53.828"N	111°52'46.365"W
USG#2 BHL ON PLAT REV-1(2689'FNL & 2409'FEL,SEC.23)		7400.00	-1103.98	1208.05	1533567.46	6760497.63	38°52'42.918"N	111°52'31.089"W
USG#2 BHL ON PLAT REV-2(2548'FNL & 852'FWL,SEC.23)	7748.22	7400.00	-1058.55	-1192.15	1531167.40	6760553.24	38°52'43.365"N	111°53'01.440"W

Bottom Hole Location

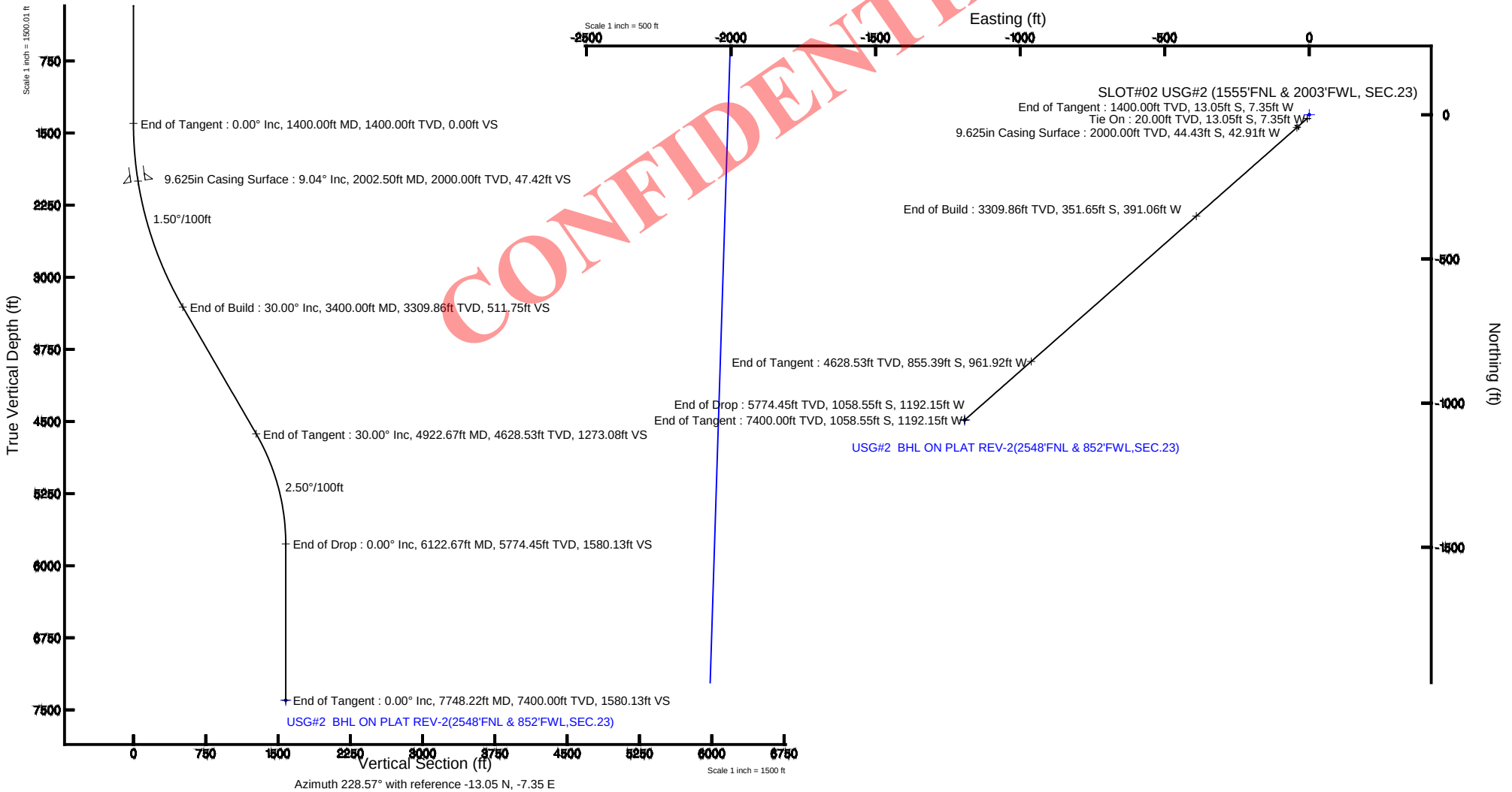
MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
7748.22	0.000	228.574	7400.00	-1058.55	-1192.15	1531167.40	6760553.24	38°52'43.365"N	111°53'01.440"W

Hole and Casing Sections

Name	Start MD (ft)	End MD (ft)	Interval (ft)	Start TVD (ft)	End TVD (ft)	Start Local N (ft)	Start Local E (ft)	End Local N (ft)	End Local E (ft)	Wellbore
9.625in Casing Surface	20.00	2002.50	1982.50	20.00	2000.00	-13.05	-7.35	-44.43	-42.91	USG#2 PWB

Survey Program

Start MD (ft)	End MD (ft)	Tool	Model	Log Name/Comment	Wellbore
20.00	8000.00	NaviTrak	NaviTrak (Standard)		USG#2 PWB



RECEIVED: October 01, 2014

API Well Number: 43041500120000

Planned Wellpath Report

USG#2 (REV-C.0) PWP

REFERENCE WELLPATH IDENTIFICATION			
Operator	**TRANS-WESTERN PETROLEUM**	Slot	**SLOT#02 USG#2 (1555'FNL & 2003'FWL, SEC.23)**
Area	**UTAH**	Well	**USG#2**
Field	**SEVIER COUNTY (NAD-83/TRUE NORTH)**	Wellbore	**USG#2 PWB**
Facility	**SEC.23-T22S-R01W**		

REPORT SETUP INFORMATION			
Projection System	**NAD83 / Lambert Utah SP, Central Zone (4302), US feet**	Software System	**WellArchitect® 4.0.0**
North Reference	**True**	User	**Painsetr**
Scale	**1.00004**	Report Generated	**9/29/2014** at **12:00:39 PM**
Convergence at slot	**n/a**	Database/Source file	**WA_Denver/USG#2_PWB.xml**

WELLPATH LOCATION	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	**East[ft]**	**Easting[US ft]**	**Northing[US ft]**	**Latitude**	**Longitude**
Slot Location	-13.05	-7.35	1532356.66	6761593.74	**38°52'53.699"N**	**111°52'46.458"W**
Facility Reference Pt			1532364.07	6761606.76	**38°52'53.828"N**	**111°52'46.365"W**
Field Reference Pt			1532364.07	6761606.77	**38°52'53.828"N**	**111°52'46.365"W**

WELLPATH DATUM			
Calculation method	**Minimum curvature**	RIG (RKB) to Facility Vertical Datum	**5885.00ft**
Horizontal Reference Pt	**Facility Center**	RIG (RKB) to Mean Sea Level	**5885.00ft**
Vertical Reference Pt	**RIG (RKB)**	RIG (RKB) to Mud Line at Slot (SLOT#02 USG#2 (1555'FNL & 2003'FWL, SEC.23))	**5885.00ft**
MD Reference Pt	**RIG (RKB)**	Section Origin	**N -13.05, E -7.35 ft**
Field Vertical Reference	**Mean Sea Level**	Section Azimuth	**228.57°**

Planned Wellpath Report

USG#2 (REV-C.0) PWP

REFERENCE WELLPATH IDENTIFICATION			
Operator	**TRANS-WESTERN PETROLEUM**	Slot	**SLOT#02 USG#2 (1555'FNL & 2003'FWL, SEC.23)**
Area	**UTAH**	Well	**USG#2**
Field	**SEVIER COUNTY (NAD-83/TRUE NORTH)**	Wellbore	**USG#2 PWB**
Facility	**SEC.23-T22S-R01W**		

WELLPATH DATA (84 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
0.00†	0.000	228.574	0.00	0.00	-13.05	-7.35	0.00	
20.00	0.000	228.574	20.00	0.00	-13.05	-7.35	0.00	Tie On
120.00†	0.000	228.574	120.00	0.00	-13.05	-7.35	0.00	
220.00†	0.000	228.574	220.00	0.00	-13.05	-7.35	0.00	
320.00†	0.000	228.574	320.00	0.00	-13.05	-7.35	0.00	
420.00†	0.000	228.574	420.00	0.00	-13.05	-7.35	0.00	
520.00†	0.000	228.574	520.00	0.00	-13.05	-7.35	0.00	
620.00†	0.000	228.574	620.00	0.00	-13.05	-7.35	0.00	
720.00†	0.000	228.574	720.00	0.00	-13.05	-7.35	0.00	
820.00†	0.000	228.574	820.00	0.00	-13.05	-7.35	0.00	
920.00†	0.000	228.574	920.00	0.00	-13.05	-7.35	0.00	
1020.00†	0.000	228.574	1020.00	0.00	-13.05	-7.35	0.00	
1120.00†	0.000	228.574	1120.00	0.00	-13.05	-7.35	0.00	
1220.00†	0.000	228.574	1220.00	0.00	-13.05	-7.35	0.00	
1320.00†	0.000	228.574	1320.00	0.00	-13.05	-7.35	0.00	
1400.00	0.000	228.574	1400.00	0.00	-13.05	-7.35	0.00	End of Tangent
1420.00†	0.300	228.574	1420.00	0.05	-13.09	-7.39	1.50	
1520.00†	1.800	228.574	1519.98	1.88	-14.30	-8.77	1.50	
1620.00†	3.300	228.574	1619.88	6.33	-17.24	-12.10	1.50	
1720.00†	4.800	228.574	1719.63	13.40	-21.91	-17.40	1.50	
1820.00†	6.300	228.574	1819.15	23.07	-28.31	-24.65	1.50	
1920.00†	7.800	228.574	1918.40	35.34	-36.43	-33.85	1.50	
2020.00†	9.300	228.574	2017.28	50.21	-46.27	-45.00	1.50	
2120.00†	10.800	228.574	2115.74	67.66	-57.82	-58.08	1.50	
2220.00†	12.300	228.574	2213.72	87.68	-71.06	-73.10	1.50	
2320.00†	13.800	228.574	2311.13	110.26	-86.00	-90.03	1.50	
2420.00†	15.300	228.574	2407.92	135.38	-102.63	-108.86	1.50	
2520.00†	16.800	228.574	2504.02	163.03	-120.92	-129.59	1.50	
2620.00†	18.300	228.574	2599.36	193.18	-140.87	-152.20	1.50	
2720.00†	19.800	228.574	2693.88	225.82	-162.47	-176.67	1.50	

Planned Wellpath Report

USG#2 (REV-C.0) PWP

REFERENCE WELLPATH IDENTIFICATION			
Operator	**TRANS-WESTERN PETROLEUM**	Slot	**SLOT#02 USG#2 (1555'FNL & 2003'FWL, SEC.23)**
Area	**UTAH**	Well	**USG#2**
Field	**SEVIER COUNTY (NAD-83/TRUE NORTH)**	Wellbore	**USG#2 PWB**
Facility	**SEC.23-T22S-R01W**		

WELLPATH DATA (84 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
2820.00†	21.300	228.574	2787.52	260.92	-185.69	-202.99	1.50	
2920.00†	22.800	228.574	2880.20	298.46	-210.53	-231.14	1.50	
3020.00†	24.300	228.574	2971.87	338.41	-236.97	-261.10	1.50	
3120.00†	25.800	228.574	3062.46	380.75	-264.98	-292.85	1.50	
3220.00†	27.300	228.574	3151.91	425.45	-294.55	-326.36	1.50	
3320.00†	28.800	228.574	3240.16	472.47	-325.67	-361.62	1.50	
3400.00	30.000	228.574	3309.86	511.75	-351.65	-391.06	1.50	End of Build
3420.00†	30.000	228.574	3327.18	521.75	-358.27	-398.56	0.00	
3520.00†	30.000	228.574	3413.78	571.75	-391.35	-436.05	0.00	
3620.00†	30.000	228.574	3500.38	621.75	-424.43	-473.54	0.00	
3720.00†	30.000	228.574	3586.99	671.75	-457.52	-511.03	0.00	
3820.00†	30.000	228.574	3673.59	721.75	-490.60	-548.52	0.00	
3920.00†	30.000	228.574	3760.19	771.75	-523.68	-586.01	0.00	
4020.00†	30.000	228.574	3846.80	821.75	-556.76	-623.51	0.00	
4120.00†	30.000	228.574	3933.40	871.75	-589.85	-661.00	0.00	
4220.00†	30.000	228.574	4020.00	921.75	-622.93	-698.49	0.00	
4320.00†	30.000	228.574	4106.60	971.75	-656.01	-735.98	0.00	
4420.00†	30.000	228.574	4193.21	1021.75	-689.09	-773.47	0.00	
4520.00†	30.000	228.574	4279.81	1071.75	-722.18	-810.96	0.00	
4620.00†	30.000	228.574	4366.41	1121.75	-755.26	-848.45	0.00	
4720.00†	30.000	228.574	4453.01	1171.75	-788.34	-885.94	0.00	
4820.00†	30.000	228.574	4539.62	1221.75	-821.43	-923.43	0.00	
4920.00†	30.000	228.574	4626.22	1271.75	-854.51	-960.92	0.00	
4922.67	30.000	228.574	4628.53	1273.08	-855.39	-961.92	0.00	End of Tangent
5020.00†	27.567	228.574	4713.83	1319.94	-886.40	-997.06	2.50	
5120.00†	25.067	228.574	4803.46	1364.27	-915.73	-1030.30	2.50	
5220.00†	22.567	228.574	4894.93	1404.65	-942.45	-1060.57	2.50	
5320.00†	20.067	228.574	4988.08	1441.00	-966.50	-1087.83	2.50	
5420.00†	17.567	228.574	5082.73	1473.25	-987.84	-1112.01	2.50	
5520.00†	15.067	228.574	5178.70	1501.34	-1006.42	-1133.07	2.50	

Planned Wellpath Report

USG#2 (REV-C.0) PWP

REFERENCE WELLPATH IDENTIFICATION			
Operator	**TRANS-WESTERN PETROLEUM**	Slot	**SLOT#02 USG#2 (1555'FNL & 2003'FWL, SEC.23)**
Area	**UTAH**	Well	**USG#2**
Field	**SEVIER COUNTY (NAD-83/TRUE NORTH)**	Wellbore	**USG#2 PWB**
Facility	**SEC.23-T22S-R01W**		

WELLPATH DATA (84 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
5620.00†	12.567	228.574	5275.80	1525.22	-1022.22	-1150.98	2.50	
5720.00†	10.067	228.574	5373.84	1544.85	-1035.21	-1165.69	2.50	
5820.00†	7.567	228.574	5472.65	1560.17	-1045.35	-1177.18	2.50	
5920.00†	5.067	228.574	5572.04	1571.17	-1052.63	-1185.43	2.50	
6020.00†	2.567	228.574	5671.81	1577.83	-1057.03	-1190.42	2.50	
6120.00†	0.067	228.574	5771.78	1580.13	-1058.55	-1192.15	2.50	
6122.67	0.000	228.574	5774.45	1580.13	-1058.55	-1192.15	2.50	End of Drop
6220.00†	0.000	228.574	5871.78	1580.13	-1058.55	-1192.15	0.00	
6320.00†	0.000	228.574	5971.78	1580.13	-1058.55	-1192.15	0.00	
6420.00†	0.000	228.574	6071.78	1580.13	-1058.55	-1192.15	0.00	
6520.00†	0.000	228.574	6171.78	1580.13	-1058.55	-1192.15	0.00	
6620.00†	0.000	228.574	6271.78	1580.13	-1058.55	-1192.15	0.00	
6720.00†	0.000	228.574	6371.78	1580.13	-1058.55	-1192.15	0.00	
6820.00†	0.000	228.574	6471.78	1580.13	-1058.55	-1192.15	0.00	
6920.00†	0.000	228.574	6571.78	1580.13	-1058.55	-1192.15	0.00	
7020.00†	0.000	228.574	6671.78	1580.13	-1058.55	-1192.15	0.00	
7120.00†	0.000	228.574	6771.78	1580.13	-1058.55	-1192.15	0.00	
7220.00†	0.000	228.574	6871.78	1580.13	-1058.55	-1192.15	0.00	
7320.00†	0.000	228.574	6971.78	1580.13	-1058.55	-1192.15	0.00	
7420.00†	0.000	228.574	7071.78	1580.13	-1058.55	-1192.15	0.00	
7520.00†	0.000	228.574	7171.78	1580.13	-1058.55	-1192.15	0.00	
7620.00†	0.000	228.574	7271.78	1580.13	-1058.55	-1192.15	0.00	
7720.00†	0.000	228.574	7371.78	1580.13	-1058.55	-1192.15	0.00	
7748.22	0.000	228.574	7400.00[1]	1580.13	-1058.55	-1192.15	0.00	End of Tangent

Planned Wellpath Report

USG#2 (REV-C.0) PWP

REFERENCE WELLPATH IDENTIFICATION			
Operator	**TRANS-WESTERN PETROLEUM**	Slot	**SLOT#02 USG#2 (1555'FNL & 2003'FWL, SEC.23)**
Area	**UTAH**	Well	**USG#2**
Field	**SEVIER COUNTY (NAD-83/TRUE NORTH)**	Wellbore	**USG#2 PWB**
Facility	**SEC.23-T22S-R01W**		

HOLE & CASING SECTIONS - Ref Wellbore: USG#2 PWB Ref Wellpath: USG#2 (REV-C.0) PWP

String/Diameter	Start MD [ft]	End MD [ft]	Interval [ft]	Start TVD [ft]	End TVD [ft]	Start N/S [ft]	Start E/W [ft]	End N/S [ft]	End E/W [ft]
9.625in Casing Surface	20.00	2002.50	1982.50	20.00	2000.00	-13.05	-7.35	-44.43	-42.91

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SEC.23-T22S-RW1		2.00	0.00	0.00	1532364.07	6761606.76	38°52'53.828"N	111°52'46.365"W	polygon
USG#2 BHL ON PLAT REV-1 (2699'FNL & 2409'FEL,SEC.23)		7400.00	-1103.98	1208.05	1533567.46	6760497.63	**38°52'42.916"N**	**111°52'31.089"W**	point
1) USG#2 BHL ON PLAT REV-2 (2548'FNL & 852'FWL,SEC.23)	7748.22	7400.00	-1058.55	-1192.15	1531167.40	6760553.24	**38°52'43.365"N**	**111°53'01.440"W**	point

SURVEY PROGRAM - Ref Wellbore: USG#2 PWB Ref Wellpath: USG#2 (REV-C.0) PWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
20.00	8000.00	NaviTrak (Standard)		USG#2 PWB

Operating Agreement

This Operating Agreement is made as of this 4th day of November, 2013 by and between United States Gypsum Company ("Lessor" or "USG"), whose headquarters is at 550 W. Adams Street, Chicago, IL, 60661-3676, and Trans-Western Petroleum, Inc. ("Lessee" or "Trans-Western"), whose address is P.O. Box 276, Golden, CO, 80402 (collectively, the "Parties"). USG also operates a gypsum quarry, wallboard plant and joint treatment facility in Sigurd, Utah.

WHEREAS, Lessor executed that certain Oil and Gas lease dated August 17, 2004 (the "Trans-Western Lease") covering certain lands located in Sevier County, Utah, attached hereto as Exhibit "A" (the "Lease Premises").

WHEREAS, the Trans-Western Lease was recorded in the Official Records of Sevier County, Utah on September 23, 2004, as Entry No. 327952, in Book 502, Pages 15-17.

WHEREAS, as a result of a "Ratification and Lease Extension" Agreement executed in December 2009 between the Parties, the Trans-Western Lease was amended to provide that the primary term of the Lease was extended for a primary term of five (5) years ending on December 11, 2014.

WHEREAS, in September 2013, Trans-Western indicated to USG that Trans-Western wished to exercise its lease rights to drill one or more exploratory wells on the Lease Premises.

NOW THEREFORE, the Parties agree to the following terms and conditions governing Trans-Western's activities on the Lease Premises.

1. Location of Drill Holes. Trans-Western has proposed to drill its first and second holes at the locations identified on Exhibit B, attached. The Parties have conferred on these locations. USG offers no objection to the drill hole locations proposed by Trans-Western. The parties will confer and document any different or additional drill hole locations.

2. Access; Road Maintenance; Power Lines.

(a) USG grants Trans-Western, its employees and designated agents, a right-of-way to enter upon and use the designated access roads on USG's property for the purpose of drilling, completing and producing oil and gas wells on the Leased Premises.

(b) In order to minimize traffic on the main road into the USG Sigurd Plant, Trans-Western has agreed to access the northern drill hole location by way of USG's Lost Canyon Road across USG properties known as the Jensen and Jumbo claims. This access route, which is marked on Exhibit B attached, utilizes rights of way owned or controlled by USG.

(c) The access roads marked on Exhibit B likely are not able to support the size and weight of the trucks and drilling equipment Trans-Western might bring on to the Lease Premises. It shall be Trans-Western's sole responsibility, not USG's, to assess the condition of the access roads and to make any needed repairs and improvements. Further, it shall be Trans-Western's sole responsibility, not USG's, to maintain and repair these access roads for as long as Trans-Western uses the Lease Premises for drilling, other exploration or production activities.

(d) Culverts shall be placed in low areas as necessary for proper drainage.

No off-road vehicle travel is permitted.

Trans-Western agrees to keep its roads free of debris and litter, and to conduct periodic trash pickup if requested by USG.

Trans-Western shall negotiate the location of all new roads with the USG prior to construction, and at that time the parties shall determine what low spots or other specific locations have a need for graveling, and whether road repairs might be needed on existing roads, including the installation of culverts.

The use and construction of roads by Trans-Western across the surface lands of USG is a non-exclusive use and USG may allow other parties to use said road. However, Trans-Western shall have the right to assess other users of the road, other than USG's or USG's agents, for their share of maintenance work performed by Trans-Western and the right to enforce said assessment.

Trans-Western shall maintain existing and newly constructed roads used by Trans-Western, which maintenance may include shaling, ditching, graveling, blading. This work shall be done at such reasonable times as deemed necessary to keep roads safe and passable.

All pipelines and gathering systems shall be located by Trans-Western in consultation with USG and in such a manner as to not interfere with existing mining operations. Pipelines shall be buried to the depth of at least three (3) feet below the surface. It is contemplated that pipelines will be co-located with the road access where feasible.

Power Lines. Trans-Western will consult with USG and with the independent power company supplying power to Trans-Western with respect to the location of overhead power lines prior to construction. Overhead power lines will be constructed so

as to cause the least possible interference with USG's existing mining operations. Overhead power lines will be constructed along fence lines, property lines, or roads . Construction shall not begin unless USG has consented to the location of such power lines. Such consent shall not be unreasonably denied.

3. Location of Trans-Western Facilities; Quarry Setbacks.

(a) Trans-Western shall notify USG prior to entry upon the Lands and shall consult with USG as to the location of each well pad, road, pipeline, power line, pod or battery site, gathering system and other facility to be placed on the Lands. If a pipeline or gathering system is to be installed by Trans-Western, Trans-Western will locate the pipeline and gathering system in a manner so as to cause the least interference with USG's existing mining operations on the affected land. Trans-Western shall notify USG when each drilling and production operation for any well drilled on the above-described land has been completed and when Trans-Western is permanently or temporarily absent from the surface in accordance with the procedures outlined herein on Exhibit C.

(b) The laydown area for all of Trans-Western's equipment, tools and supplies needed to drill each well will be agreed to by the parties as to size and location and the agreement will be documented before drilling begins at each hole. The Parties agree that Trans-Western will utilize no other part of the Lease Premises during this exploratory phase of Trans-Western's operations.

(c) Should Trans-Western convert its exploratory well into a production well, the Parties agree to negotiate in good faith with respect to the exact location of pipeline routes, tank farms and other areas that Trans-Western may need for equipment, tools and supplies needed for production. In particular, with respect to each drill location, the

Parties will confer and negotiate in good faith an appropriate setback distance to accommodate USG's gypsum quarry operations which require drilling and blasting.

(d) Improvements. No fences, cattleguards or other improvements on USG's property shall be cut or damaged by Trans-Western without the prior written consent of USG and the payment of additional damages or the institution of other safeguards to protect the rights and property of the USG. Upon final termination of Trans-Western's rights under this Agreement, Trans-Western shall return all roads and other rights-of-way or sites as near as practical to the condition which they were in prior to the execution of this Agreement, unless otherwise agreed by USG.

4. USG Potential use of Produced Water and Natural Gas. Should Trans-Western's production well result in either (a) produced water that might be suitable for dust suppression in USG quarry areas; or (b) natural gas that can be used in USG's wallboard plant at Sigurd, the Parties agree to negotiate reasonable and customary terms under which USG will be allowed to take both water and/or gas for its own operations at Sigurd.

5. Reclamation. Reclamation responsibility for any USG quarry areas which are impacted by Trans-Western's activities will be assumed by Trans-Western and Trans-Western will fully cooperate in making application to the Utah Division of Oil, Gas and Mining to relieve USG of reclamation and bonding requirements for such areas and to transfer such obligations to Trans-Western.

6. Termination of Rights. The rights granted by USG to Trans-Western shall terminate: (1) when the current Oil and Gas Lease(s) terminates, (2) when Trans-Western ceases its operations on the land, or (3) upon Trans-Western's written

notification to USG of Trans-Western's abandonment and cessation of operations. Upon termination of this Agreement, Trans-Western will execute and deliver to USG a good and sufficient recordable release and surrender of all of Trans-Western's rights under this Agreement, and will promptly remove all equipment and property used or placed by Trans-Western on the Lands unless otherwise agreed by USG in writing.

7. Non-Exclusive Rights. The rights granted by USG to Trans-Western are non-exclusive, and USG reserves the right to use all access roads and all surface and subsurface uses of the land affected by this Agreement and the right to grant successive easements thereon or across on such terms and conditions as USG deems necessary or advisable.

8. Permits and Regulations.

(a) Trans-Western shall obtain all necessary permits and licenses, give all notices and comply with all laws, ordinances, rules, regulations or orders affecting its work done under this Agreement and shall pay all fees and charges in connection therewith. If applicable, Trans-Western shall assume all responsibility for assuring that its own and its Contractor personnel received all required MSHA training and that USG shall have no responsibility to deliver MSHA training to Trans-Western's personnel including contractor personnel. Further, Trans-Western will secure from Sevier County an Encroachment Permit to use county roads and a Conditional Use Permit for the drilling operation. Copies of all permits will be forwarded to USG. Trans-Western agrees to bear all costs, expenses, damages and fines arising out of its violation of such laws, ordinances, rules, regulations or orders including all costs and expenses of conforming the work to the requirements thereof.

(b) Trans-Western shall promptly report to USG any and all Notices of Violation from any other local, state or federal agency.

9. Responsibility for the Site. During the time of Trans-Western's active operations on the Lease Premises, Trans-Western and not USG will be solely responsible for all damage to Trans-Western's equipment and for any and all third party claims including claims relating to the condition of the Lease Premises.

10. "As Is" Condition; Safety. Trans-Western, on behalf of itself and its contractors and their respective employees and agents, accepts the Lease Premises in AS IS condition, Trans-Western hereby acknowledging that Trans-Western has had ample opportunity to perform any and all investigation and testing that it desires. Without limiting the generality of the foregoing, the Parties shall agree on safety rules applicable during USG quarry blasting operations. It shall be the duty of Trans-Western, and not USG, to provide for the safety of, and prevention of accident or injury to, Trans-Western and its contractors, and their respective employees, agents and invitees while in, on or about the Lease Premises by carefully inspecting the Lease Premises before starting and from time to time thereafter for any and all dangerous conditions or activities in, on or about said Lease Premises and by giving notice of dangerous conditions and activities, by installing and maintaining at all times such safety devices, guards, barricades and danger signs and by adopting such other measures as shall be necessary to safeguard said persons against all such dangerous conditions and activities however arising; to protect any and all other persons lawfully, or unlawfully, in, or about said Lease Premises by similar measures against all dangerous conditions or activities arising out of work performed by Trans-Western such as openings in the

ground or structures, protruding objects, drilling equipment, obstructions and falling materials; to comply with and enforce all applicable Federal, State and Local safety laws, ordinances, rules, regulations and codes; and upon completion of the work, to leave the Lease Premises in a condition conforming to all safety requirements.

11. Indemnity. Trans-Western agrees to release, indemnify, defend, and save harmless USG from and against any and all suits, actions, claims, damages or costs (including attorney's fees) arising out of loss of or damage to the property of any person or persons whomsoever (including, but without limitation, all materials, supplies, equipment or other property of Trans-Western or its contractors) or arising out of injury to or death of any person or persons whomsoever (including, but not limited to, Trans-Western, any contractor, or the employees or agents of any of them), to the extent that any such loss, damage, injury or death shall result directly or indirectly from any act or omission, presence on the Lease Premises or access roads, or any breach of any statutory duty, on the part of Trans-Western or its contractors, either in the performance of this Agreement or outside said performance but in, on or about the Lease Premises.

12. Insurance. Trans-Western and its contractors shall carry the following insurance with minimum limits as specified below with an insurance carrier or carriers to be first approved by USG and covering all employees, operations and activities of Trans-Western in connection with its operations under the Trans-Western Lease and this Agreement. Insurance provided by the Trans-Western or its contractors shall be deemed primary to any other available insurance.

A	Workers' Compensation Insurance, including Occupational Disease and Employer's Liability Insurance	Workers' Compensation **STATUTORY** Employers Liability $500,000 each occurrence

B	Commercial General Liability Insurance shall be on an "occurrence" basis and shall include Products and Completed Operations, Broad Form Property Damage and Contractual Liability coverage.	Commercial General Liability (bodily injury and property damage) $1,000,000 each occurrence/aggregate Products/Completed Operations Aggregate Limit $1,000,000 General Policy Aggregate $1,000,000
C	Automobile Liability	$1,000,000 each person/occurrence Bodily Injury $1,000,000 each occurrence Property Damage Or $1,000,000 combined single limit
D	Umbrella Liability Coverage	$10,000,000 each occurrence/aggregate
E	Not applicable.	
F	USG shall be named as an additional insured under all liability coverage listed above.	
G	Such other insurance, or the insurance described above, with such higher limits as may be provided in this Agreement under the description of work.	
H	Trans-Western' insurance shall be endorsed to indicate that it is primary to any insurance maintained by USG.	
I	Before starting work, Trans-Western shall furnish to USG duly executed certificates of insurance, or copies of policies if requested evidencing that the required insurance and endorsements are in force, with a 30 day cancellation or material coverage change notice provision.	

13. Liens and Encumbrances. Trans-Western shall not suffer or permit any claim, lien, attachment or other encumbrance to be put or remain upon the Lease Premises or other property of USG by Trans-Western or any third person whomsoever or any claim of the third person to be made against USG on account of any matter connected with the performance of this Agreement or any other contract between or among the parties, including, without limitation, the furnishing of material, supplies and equipment and the performance of labor or services. Trans-Western shall not use in its

drilling on the Lease Premises any goods or materials to which it does not have absolute title. Any such claim, lien, attachment or other encumbrance or any such claim of a third person shall be by Trans-Western removed, and in the event the same is not removed, USG may remove the same at the expense (including costs and attorney's fees) of Trans-Western.

14. Confidentiality. Each party acknowledges that its respective performance of its obligations hereunder may require that it have access to confidential business and proprietary information of the others. Each party agrees on behalf of itself and its officers, directors, employees, agents, representatives and subcontractors to use its/their best efforts to prevent either duplication or disclosure of data, plans, specifications, formulae, drawings or any other information, whether business or technical, of a confidential nature, which has been furnished directly or indirectly, in writing or otherwise, to the others.

"Confidential Information" shall include such information as would be apparent to a reasonable person, familiar with the disclosing party's business and the industry in which it operates, that such information is of a confidential or proprietary nature and that maintenance of its confidentiality would likely be of commercial value to the disclosing party.

Confidential Information shall not include information that is in the public domain prior to its disclosure, becomes part of the public domain through no wrongful act of the receiving party, or was in the lawful possession of the receiving party prior to its disclosure to the receiving party or was independently developed by the receiving party.

15. Entire Agreement. This Agreement and the Trans-Western Lease described above constitutes the entire agreement between the parties with respect to the subject matter hereof and supersede and replace all prior agreements, understanding and representations, whether written or oral. This agreement cannot be modified or amended except by written agreement signed by duly authorized officers of USG and Trans-Western.

16. Applicable Law. This Agreement shall be construed in accordance with the laws of the State of Utah, without regard to Utah's laws on conflicts of law.

17. Arbitration. If any dispute shall arise between USG and Trans-Western pertaining in any manner to the construction or interpretation of this Agreement, or to the rights or obligations of the parties to this Agreement, or to any alleged breach of this Agreement, which the parties are unable to settle by mutual consent, the parties agree to have the dispute determined by arbitration in accordance with the Commercial Arbitration Rules of the American Arbitration Association then in effect. The parties agree to have the dispute heard before a single arbitrator in Salt Lake City, Utah, unless otherwise agreed by the parties and the parties shall share equally the cost of the arbitrator. The arbitrator shall not be permitted to award punitive damages.

18. Recording. This Agreement may not be recorded without the written consent of USG.

19. Geological Data. Trans-Western's drilling is expected to go through geological formations known to USG to contain gypsum and anhydrite. Trans-Western agrees to provide to USG all drill log information and access to examine and/or sample

drill core of the first Six Hundred (600) feet below surface which Trans-Western obtains in the course of its drilling program.

LESSEE:

TRANS-WESTERN PETROLEUM. INC.

By: _____

Its: President

LESSOR:

UNITED STATES GYPSUM COMPANY

By: _____

Its: _____

Exhibits

Exhibit A	Lease
Exhibit B	Map showing northern drill hole sites and access roads
Exhibit C	Additional responsibilities of Trans-Western

Exhibit C

ADDITIONAL RESPONSIBILITIES OF TRANS-WESTERN

1. Trans-Western shall submit to USG an Operations Plan showing generally where and when and what type of activity will occur on the Lease Premises and also periodic progress reports showing the progress of Trans-Western's work with comparisons made to the most current Operations Plan. Because USG is operating a quarry on or near the Lease Premises, for safety reasons, USG needs to know exactly where Trans-Western and Contractor personnel will be at all times. Specifically, USG and Trans-Western shall address safety rules applicable during USG quarry blasting operations.

2. Trans-Western understands and agree that USG or other contractors shall be working in and around the Lease Premises. Trans-Western agrees to coordinate its work with the work of others and to afford such other parties reasonable access to the Lease Premises so as to enable such other parties to perform their work.

3. Trans-Western shall appoint a field representative who shall have full direction and charge of its work. Trans-Western shall have its representative on site during all times while their employees or contractors are on site to ensure the work is managed/directed properly. The representative shall be fully authorized to act on behalf of Trans-Western. Any communications to such representative shall be binding upon Trans-Western.

4. USG may require Trans-Western to remove any of its personnel from the Lease Premises whom USG deems to be objectionable in USG's sole judgment. Any such person shall be immediately removed from the Lease Premises and shall not again be reassigned to the Lease Premises without USG's written consent.

5. Trans-Western shall advise USG of any actual or potential labor dispute.

6. **ASSIGNMENT**. Neither Trans-Western nor USG shall make any assignment of its rights and obligations under this Agreement without first obtaining the express written consent of the other Party whish shall not be unreasonably withheld.

7. **SUBCONTRACTORS.** Trans-Western shall not contract all or any portion of the work

hereunder to any other party without first binding such Contractors to all of the terms and provisions of this Operating Agreement.

8. **MEDICAL EXPENSES.** USG may furnish emergency medical treatment or related services to Trans-Western's or Contractor's employees in the event of accident or work-related illness occurring at the Lease Premises. In the event that any such services are available, such treatment shall be furnished on a "good Samaritan" basis and not as a contractual obligation. In consideration for any treatment or services, Trans-Western assumes all liability for and agrees to defend, indemnify and hold USG harmless for any injuries and damages to any of their employees or contractor personnel arising out of or in any way attributable to such emergency services, regardless of legal theory or negligence (including sole negligence) of the parties. Nothing contained in this provision shall impose a duty upon USG to furnish such services to Trans-Western's employees or contractors.

9. **TRANS-WESTERN SHALL:**

- Provide port-a-johns for its employees.
- Provide for telephone or cell phone services as needed.
- Be responsible for providing electric and water connections, if needed.
- Be responsible for providing drinking water, ice, trash containers and trash disposal (at an offsite location).
- Be responsible for any office facilities required by Trans-Western.
- Require their employees to park their vehicles only in the designated lay down areas for each well marked on Exhibit C/Appendix 1 or as otherwise agreed by the parties.

10. (a) Trans-Western shall prepare and implement a Health and Safety Program (the "Safety Program") and also a Spill Prevention Control and Counter-measures Plan. Such plans shall identify how the Trans-Western intends to protect structures, equipment, and personal property on the project site from environmental harm, preserve worker health and safety, and control the risk of environmental liability arising from the presence of Hazardous Substances, for example, drilling fluids, known to Trans-Western to be present or which might reasonably be anticipated by the Contractor to be encountered in the course of Trans-Western's activities.

(b) Contractor and Trans-Western will maintain safety training records for each of its

on site employees and will provide those records to USG upon request.

(c) Material Safety Data Sheets and technical data sheets for drilling fluids and all other chemicals of any kind brought out to the premises must be furnished to USG at least three (3) days before they are brought on the Lease Premises.

(d) Contractor and Trans-Western must ensure that all job-related injuries and illnesses, no matter how minor, are reported to USG immediately.

(e) USG supervisors must be notified immediately when any chemical or oil spill occurs, no matter how small. Spill control and clean-up will only be accomplished by trained personnel. Trans-Western shall be responsible for costs involved with clean up and disposal of spills. Such disposal shall include obtaining all necessary federal or state identification numbers, permits, and licenses required for the proper disposal of such hazardous wastes or toxic substances. Any and all costs incurred with respect to environmental consideration shall be the sole responsibility of Trans-Western.

11. No mobile equipment or machinery of any kind shall be serviced on the Lease Premises. Trans-Western shall provide equipment, supplies and training to deal with all spills of fuel, hydraulic oil, brake fluid and any other liquids. All mobile equipment and equipment drivers shall be properly registered, licensed and insured.

12. Trans-Western shall provide shore and bank protection for all streams and ponds on the Lease Premises, permanent or seasonal, as per federal or state laws and regulations.

13. All drill holes shall be closed per Utah regulations.

14. Firearms, Illegal Drugs and Alcohol. None of Trans-Western's employees or authorized agents or any other person under the direction or control of Trans-Western shall be permitted to carry firearms or any weapon while crossing USG's property, and such persons shall not hunt or fish on USG's property and shall not trespass on USG's property for the purposes of hunting or fishing or recreational uses. Trans-Western will notify all of its contractors, agents and employees that no firearms, weapons, hunting, fishing or recreational activities will be allowed on USG's property. None of Trans-Western's

employees or authorized agents or any other person under the direction or control of Trans-Western shall possess or be under the influence of alcohol or illegal drugs while on USG's land.

15. In no event shall USG be liable for any loss of or damage to tools and equipment belonging to Trans-Western, or any Contractor. Trans-Western agrees to insure or self-insure such property and waive all recovery and subrogation rights against USG for any such loss or damage, regardless of the negligence of USG.

16. This agreement shall extend and apply to future acquisition by TWP of leases or mineral interests in which USG has the Surface Rights or mining operations that are located within the Township containing The Lease Premises or to the contiguous Townships of The Lease Premises.

API Well Number: 43041500120000

4320

EXHIBIT A

PRODUCERS 88-PAID UP
Rev. 5-60, No.2 – 8pt.

OIL AND GAS LEASE

AGREEMENT, Made and entered into the 17th day of August, 2004, by and between United States Gypsum Company

Whose post office address is 125 Franklin Street, Chicago, Illinois 60606-4678 hereinafter called Lessor (whether one or more) and

Trans-Western Petroleum, Inc. Whose post office address is PO Box 276, Golden, CO 80402, hereinafter called Lessee:

WITNESSETH, That the Lessor, for and in consideration of Ten and More DOLLARS cash in hand paid, the receipt of which is hereby acknowledged, and the covenants and agreements hereinafter contained, has granted, demised, leased and let, and by these presents does grant, demise, lease and let exclusively unto the said Lessee, the land hereinafter described, with the exclusive right for the purpose of mining, exploring by geophysical and other methods, and operating for and producing therefrom oil and gas of whatsoever nature, or kind, with rights of way and easements for laying pipe lines, and erection of structures thereon to produce, save and take care of said products, all that certain tract of land situated in the County of Sevier, State of Utah, described as follows, to-wit:

See Exhibit "A" attached hereto

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JAYRENE B NIELSEN RECORDER SEVIER COUNTY
2004 SEP 23 12:55 PM FEE $43.00 BY PSP
REQUEST: TRANS-WESTERN PETROLEUM INC

and containing 1,720 acres, more or less.

1. It is agreed that this lease shall remain in force for a term of ten years from this date and as long thereafter as oil or gas of whatsoever nature or kind is produced from said leased premises or on acreage pooled therewith, or drilling operations are continued as hereinafter provided. If, at the expiration of the primary term of this lease, oil or gas is not being produced on the leased premises or on acreage pooled therewith but Lessee is then engaged in drilling or re-working operations thereon, then this lease shall continue in force so long as operations are being continuously prosecuted on the leased premises or on acreage pooled therewith; and operations shall be considered to be continuously prosecuted if not more than ninety (90) days shall elapse between the completion or abandonment of one well and the beginning of operations for the drilling of a subsequent well. If after discovery of oil or gas on said land or on acreage pooled therewith, the production thereof should cease from any cause after the primary term, this lease shall not terminate if Lessee commences additional drilling or re-working operations within ninety (90) days from date of cessation of production or from date of completion of dry hole. If oil or gas shall be discovered and produced as a result of such operations at or after the expiration of the primary term of this lease, this lease shall continue in force so long as oil or gas is produced from the leased premises or on acreage pooled therewith.

2. This is a PAID-UP LEASE. In consideration of the down cash payment, Lessor agrees that Lessee shall not be obligated, except as otherwise provided herein, to commence or continue any operations during the primary term. Lessee may at any time or times during or after the primary term surrender this lease as to all or any portion of said land and as to any strata or stratum by delivering to Lessor or by filing for record a release or releases, and be relieved of all obligation thereafter accruing as to the acreage surrendered.

3. In consideration of the premises the said Lessee covenants and agrees:

1st. To deliver to the credit of Lessor, free of cost, in the pipe line to which Lessee may connect wells on said land, the equal one-eighth (1/8) part of all oil produced and saved from the leased premises.

2nd. To pay Lessor one-eighth (1/8) of the gross proceeds each year, payable quarterly, for the gas from each well where gas only is found, while the same is being used off the premises, and if used in the manufacture of gasoline a royalty of one-eighth (1/8), payable monthly at the prevailing market rate for gas.

3rd. To pay Lessor for gas produced from any oil well and used off the premises or in the manufacture of gasoline or any other product a royalty of one-eighth (1/8) of the proceeds, at the mouth of the well, payable monthly at the prevailing market rate.

4. Where gas from a well capable of producing gas is not sold or used, Lessee may pay or tender as royalty to the royalty owners One Dollar per year per net royalty acre retained hereunder, such payment or tender to be made on or before the anniversary date of this lease next ensuing after the expiration of 90 days from the date such well is shut in and thereafter on or before the anniversary date of this lease during the period such well is shut in. If such payment or tender is made, it will be considered that gas is being produced within the meaning of this lease.

5. If said Lessor owns a less interest in the above described land than the entire and undivided fee simple estate therein, then the royalties (including any shut-in gas royalty) herein provided for shall be paid the Lessor only in the proportion which Lessor's interest bears to the whole and undivided fee.

6. Lessee shall have the right to use, free of cost, gas, oil and water produced on said land for Lessee's operation thereon, except water from the wells of Lessor.

7. When requested by Lessor, Lessee shall bury Lessee's pipe line below plow depth.

8. No well shall be drilled nearer than 200 feet to the house or barn now on said premises without written consent of Lessor.

9. Lessee shall pay for damages caused by Lessee's operations to growing crops on said land.

10. Lessee shall have the right at any time to remove all machinery and fixtures placed on said premises, including the right to draw and remove casing.

11. The rights of Lessor and Lessee hereunder may be assigned in whole or part. No change in ownership of Lessor's interest (by assignment or otherwise) shall be binding on Lessee until Lessee has been furnished with notice, consisting of certified copies of all recorded instruments or documents and other information necessary to establish a complete chain of record title from Lessor, and then only with respect to payments thereafter made. No other kind of notice, whether actual or constructive, shall be binding on Lessee. No present or future division of Lessor's ownership as to different portions or parcels of said land shall operate to enlarge the obligations or diminish the rights of Lessee, and all Lessee's operations may be conducted without regard to any such division. If all or any part of this lease is assigned, no leasehold owner shall be liable for any act or omission of any other leasehold owner.

12. Lessee, at its option, is hereby given the right and power at any time and from time to time as a recurring right, either before or after production, as to all or any part of the land described herein and as to any one or more of the formations hereunder, to pool or unitize the leasehold estate and the mineral estate covered by this lease with other land, lease or leases in the immediate vicinity for the production of oil and gas, or separately for the production of either, when in Lessee's judgment it is necessary or advisable to do so, and irrespective of whether authority similar to this exists with respect to such other land, lease or leases. Likewise, units previously formed to include formations not producing oil or gas, may be reformed to exclude such non-producing formations. The forming or reforming of any unit shall be accomplished by Lessee executing and filing of record a declaration of such unitization or reformation, which declaration shall describe the unit. Any unit may include land upon which a well has theretofore been completed or upon which operations for drilling have theretofore been commenced. Production, drilling or reworking operations or a well shut in for want of a market anywhere on a unit which includes all or a part of this lease shall be treated as if it were production, drilling or reworking operations or a well shut in for want of a market under this lease. In lieu of the royalties elsewhere herein specified, including shut-in gas royalties, Lessor shall receive on production from the unit so pooled royalties only on the portion of such production allocated, to this lease; such allocation shall be that proportion of the unit production that the total number of surface acres covered by this lease and included in the unit bears to the total number of surface acres in such unit. In addition to the foregoing, Lessee shall have the right to unitize, pool, or combine all or any part of the above described lands as to one or more of the formations thereunder with other lands in the same general area by entering into a cooperative or unit plan of development or operation approved by any governmental authority and, from time to time, with like approval, to modify, change or terminate any such plan or agreement and, in such event, the terms, conditions and provisions of this lease shall be deemed modified to conform to the terms, conditions, and provisions of such approved cooperative or unit plan of development or operation and, particularly, all drilling and development requirements of this lease, express or implied, shall be satisfied by compliance with the drilling and development requirements of such plan or agreement, and this lease shall not terminate or expire during the life of such plan or agreement. In the event that said above described lands or any part thereof, shall hereafter be operated under any such cooperative or unit plan of development or operation whereby the production therefrom is allocated to different portions of the land covered by said plan, then the production allocated to any particular tract of land shall, for the purpose of computing the royalties to be paid hereunder to Lessor, be regarded as having been produced from the particular tract of land to which it is allocated and not to any other tract of land; and the royalty payments to be made hereunder to Lessor shall be based upon production only as so allocated. Lessor shall formally express Lessor's consent to any cooperative or unit plan of development or operation adopted by Lessee and approved by any governmental agency by executing the same upon request of Lessee.

13. All express or implied covenants of this lease shall be subject to all Federal and State Laws, Executive Orders, Rules or Regulations, and this lease shall not be terminated, in whole or in part, nor Lessee held liable in damages, for failure to comply therewith, if compliance is prevented by, or if such failure is the result of, any such Law, Order, Rule or Regulation.

14. Lessor hereby warrants and agrees to defend the title to the lands herein described, and agrees that the Lessee shall have the right at any time to redeem for Lessor, by payment, any mortgages, taxes or other liens on the above described lands, in the event of default of payment by Lessor and be subrogated to the rights of the holder thereof, and the undersigned Lessors, for themselves and their heirs, successors and assigns, hereby surrender and release all right of dower and homestead in the premises described herein, insofar as said right of dower and homestead may in any way affect the purposes for which this lease is made, as recited herein.

15. Should anyone or more of the parties hereinabove named as Lessor fail to execute this lease, it shall nevertheless be binding upon all such parties who do execute it as Lessor. The word "Lessor," as used in this lease, shall mean anyone or more or all of the parties who execute this lease as Lessor. All the provisions of this lease shall be binding on the heirs, successors and assigns of Lessor and Lessee.

IN WITNESS WHEREOF, this instrument is executed as of the date first above written.

UNITED STATES GYPSUM COMPANY

By: _____

EXHIBIT "A"

Attached hereto and made a part of Oil and Gas Lease by and between United States Gypsum Company, LESSOR, and Trans-Western Petroleum, Inc., LESSEE, dated August 17th, 2004.

PARCEL 1: Jumbo Gypsum Nos. 22 and 23 Placer Mining Claims, comprising the Southwest Quarter (SW1/4) of Section 28, the West Half of the Northwest Quarter (W/2NW/4) Of Section 33, Township 22 South, Range 1 West, Salt Lake Meridian, as described in United States Patent #1102914 issued on May 26, 1939, and containing 240 acre. of land, more or less.

PARCEL 2: Jumbo Gypsum Nos. 24, 25, 26 and 27 Placer Mining Claims, comprising the Northeast Quarter (NE/4) and the Southeast Quarter (SE/4) of section 32; the Southwest Quarter (SW/4) of Section 33;and the Southeast Quarter (SE/4) of Section 29, All in Township 22 South, Range 1 West, Salt Lake Meridian, as described in United States Patent #1120497 issued on January 18, 1946, and containing 640 acres of land, more or less.

PARCEL 3: Jumbo Gypsum Nos.33 and 34 Placer Mining Claims, comprising the East Half of the Northeast Quarter of the Northwest Quarter (E/2NE/2NW/4), and the East Half of the Southeast Quarter of the Northwest Quarter (E/2SE/4NW/4) of Section 32, Township 22 South, Range 1 West, Salt Lake Meridian, as described in United States Patent #1120498 issued on January 19, 1946, and containlng 40 acres of land, more or less .

PARCEL 4: United Nos. 2, 3, and 4 Placer Mining Claims, comprising the West Half (W/2) of Section 15, and the Northwest Quarter (NW/4) of Section 22, Township 22 South, Range 1 West, Salt Lake Meridian, as described in United States Patent #1158715 issued on April 6, 1956, and containing 480 acres of land, more or less.

PARCEL 5: Family No. 1 and Nos. 6 Placer Mining Claims, comprising Lots 5, 6, 7, 8, 9, 10, 11, and 12 of Section 23, Townshlp 22 South, Range 1 West, Salt Lake Meridian, as described in United States Patent #1153012 issued on July 18, 1955, and containing 320 acres of land, more or less.

Containing a total of 1,720 acres, more or less

Signed For Identification

United States Gypsum Company

By: _____

Additional Provisions:

16. **Lessee shall conduct surface operations so that they do not interfere with existing mining operations of Lessor.**
17. **All references to a 1/8th Royalty shall be replaced to read 1/6th Royalty.**
18. **This lease shall have a primary term of five (5) years.**

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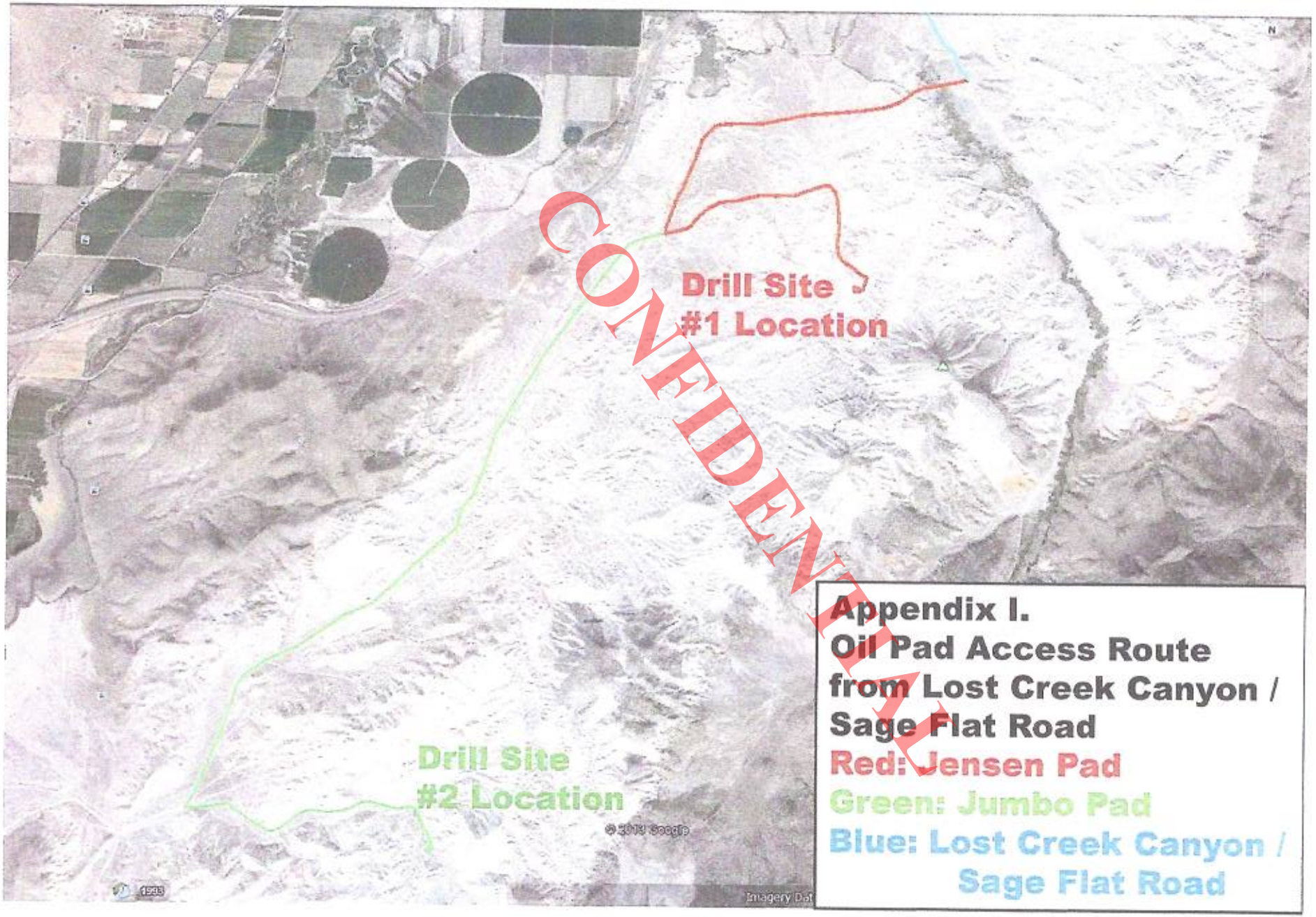
Exhibit B



SURFACE USE PLAN OF OPERATIONS

For inclusion with Application for Permit to Drill

Name of Operator:	Trans-Western Petroleum LTD., Inc.
Operator Number:	N4105
Address:	PO Box 276 Golden, CO 80402
Surface Well Location:	1,555' FNL & 2,003' FWL, being in Lot 6 (NE/4 NW/4) Section 23, T22S, R1E, SLB&M Sevier County, Utah
Bottom Hole Location:	2,548' FNL & 852' FWL, being in Lot 12 (SW/4 NW/4) Section 23, T22S, R1E, SLB&M Sevier County, Utah
Access Road Location:	Access road to be a double driveway off the west side of Sage Flat Road.

Fee surface use is required for construction and drilling of the referenced well. United States Gypsum Company is the surface owner of the access mining property road, drill pad site and the mineral owner of the well path and bottom hole location.

Existing Roads:

The vicinity map in the APD packet shows the proposed well location and its proximity to Salina, Utah. The proposed location is about 5.3 miles southwest of the Salina City, Utah town center.

Driving directions: From 4 Way Stoplight at the Intersection of State & Main Streets in Salina City, turn West on Main Street. Main Street turns southwest into Utah highway 24. Follow highway 24 for a few miles (2.1 miles from the stoplight)

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to the Lost Creek/Sage Flat Roads turnoff on the left. Follow Lost Creek/Sage Flat Road generally south, under Interstate 70 and 1.1 miles beyond the Interstate 70 overpass. Turn right onto a mine road. Follow the mine road roughly 3 miles west to a T intersection with another mine road. Turn left onto this 2nd mine road. Follow this 2nd mine road roughly 3-1/2 miles up the side of the mountain. The road dead-ends onto the well site. The top of Carter Peak is located roughly 1/2 mile south of the drill site.

Access Roads to be Constructed and Reconstructed:

The proposed access driveway will require a permit from Sevier County, Utah. Because the Lost Creek/Sage Flat Road driveway is now maintained by Sevier County an encroachment permit will also be obtained from the Sevier County Road Department. The west mine property driveway will have a travel surface about 20 to 30 feet in width, being about 6.5 miles in length.

See the Vicinity Map for project location and the Survey Plat for pad layout and dimensions. This is a pre-existing pad on which the Trans-Western Petroleum USG #1 (USG #1) well is staked and permitted. This drilling of this well will follow immediately the drilling of the USG #1 well.

The mine road driveway use, improvement, operation and maintenance will be in compliance with the terms and conditions of the UDOGM Conditions of Approval and the Operating Agreement by and between United States Gypsum Company and Trans-Western Petroleum, Inc.

The mine road driveway to be used is a pre-existing mine road designed and constructed by United States Gypsum Company on United States Gypsum Company's fee land in accordance with their mining permits.

The mine road driveway will be maintained and kept in good repair during all phases of operation. Vehicle operators will obey posted speed restrictions and observe safe speeds commensurate with road and weather conditions.

Location of Existing Wells within a one-mile radius:

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There are two plugged and abandoned wells located within a one-mile radius of the proposed well. These wells are the Forest Oil, Sigurd Unit #1 (API # 43-041-30018) and Wolverine, Carter Peak #1, (API # 43-041-50002. The Sigurd Unit #1 is about a mile from the proposed Trans-Western Petroleum USG #2 bottom hole location. The Carter Peak Federal #1 is about a mile from the proposed Trans-Western Petroleum USG #2 bottom hole location.

Location of Planned Wells:

There is also, at this time, the USG #1 (API # 43-041-50011) permitted location about 2500' from the proposed USG #2 bottom hole location.

Location of Existing and/or Proposed Facilities if Well is Productive:

(a) On well pad - A temporary testing facility may be constructed on this location in the event drilling is successful, consisting of treater/separator, tanks and related components. The facility would be surrounded by a berm of sufficient capacity to contain the storage capacity of the largest tank. All loading lines and valves would be located inside the berm surrounding the tank battery.

(b) Off-well pad - At present no off-well-pad facilities are planned.

Location and Type of Water Supply (Rivers, Creeks, Lakes, Ponds and Wells):

The Operator intends to purchase water from the City of Salina (Water System 21014). Source of water is Lost Creek. Water will be trucked to water storage tanks from a fire hydrant on Lost Creek Road/Sage Flat Road, as directed by the Salina City water department. Should additional water sources be pursued they will be properly permitted through the State of Utah - Division of Water Rights. UDOGM will be notified of any changes in water supply.

Construction Materials:

This pad is a pre-existing pad which was constructed for drilling the USG #1 well. Natural earth materials used for fill on the well pad have been taken from cuts made in construction of the pad. Imported granular borrow from an approved

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source was applied to the surface of the well pad and driveways where deemed necessary. No construction materials will be removed from state lands.

Methods for Handling Waste Disposal:

Drilling and completion will utilize a drill solids and cuttings handling system called a “closed loop system”. Steel containers will be used for the temporary storage of waste mud and drill cuttings. All borehole fluids, fresh water and make-up brine will be contained in the drilling rig’s active mud tanks system, a steel tank or pre-mix steel containers. Steel containers will be located on cut portions of the drill pad. Waste fluids and drill cuttings will be disposed offsite at the Sevier County landfill facility or another approved disposal site. After drilling of the well and both before and after the rig moves off any remaining fluids in the closed loop system will be pumped out of the steel containers and transported off site and disposed of at an approved disposal site.

No chemicals subject to reporting under SARA Title III (hazardous materials) in an amount greater than 10,000 pounds will be used, produced, stored, transported, or disposed of in association with the drilling, testing, or completion of the well. Furthermore, no extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities, will be used, produced, stored, transported, or disposed of in association with the drilling, testing, or completion of the well.

Wastewater will not be discharged on the ground surface at this site and the drilling of the well will not require a wastewater management plan.

All rubbish and debris will be kept in containers on the well site, and will be hauled to an approved disposal site both during and upon completion of drilling operations. There will be no chemical disposal of any type.

Self-contained, portable toilets will be used for human waste, and the waste will be disposed at an approved human waste disposal facility. Sanitation will comply with local and state regulations.

Ancillary Facilities:

No ancillary facilities are anticipated at this time.

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Well Site Layout:

Pad Location and Layout Drawings in the APD packet show the existing USG #1 well site layout including location of the closed loop system and access roads onto the pad, turnaround areas, parking areas, living facilities, soil material stockpiles, and the orientation of the rig with respect to the pad and other facilities. As detailed above under Methods for Handling Waste Disposal a closed loop system will be used. The closed loop system consists of equipment to remove solids from liquid. The removed liquid is returned to the active mud system. Steel containers will be used to contain damp cuttings. The damp cuttings are then transferred to disposal. There are no "liquid storage" tanks associated with the closed loop system as there is no liquid to store. The closed loop system will not be fenced, bermed or lined during drilling operations. The closed loops system will be moved off concurrent with the removal of the drill rig.

The pad design is would be consistent with engineering drawings and UDOGM specifications associated with permit approval for the USG #1 well. The mine roads will be maintained in accord with existing agreements with the United States Gypsum Company. The Sevier county roads will be maintained according to directions of the county.

United States Gypsum Company has been actively mining gypsum in this area and has disturbed the surface as permitted by their mining permits. A pre-construction meeting with responsible company representative and contractors was conducted at the project site prior to commencement of oil and gas surface-disturbing activities associated with building the pad for the USG #1 well. The pad was constructed in accord with the conditions agreed to at that meeting.

All surface disturbing activities will be supervised by a qualified, responsible company representative who is aware of the terms and conditions of approval from UDOGM under the approved APD.

All cut and fill slopes were constructed such that stability can be maintained for the life of the activity.

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Due to the prior mining activity and no topsoil being available on this exposed Arapien formation outcrop, we do not plan to attempt to save topsoil in the normal manner.

Water spraying may be implemented if necessary to minimize airborne dust.

Plans for Reclamation of the Surface:

The road and location are in an active mine site operated by United States Gypsum Company. Reclamation of the surface will be consistent with United States Gypsum Company mining permit conditions; comply with all applicable laws; and will be coordinated with Unites State Gypsum Company.

Interim Reclamation: In the event production is achieved the Operator will perform interim reclamation of the site as needed. Interim reclamation normally would consist of reclamation of that portion of the well pad not needed for ongoing operations. The well pad area used will be graveled as needed to render it a usable part of the well pad. The edges of the well pad will be scarified and seeded as per UDOGM conditions of approval.

Final Reclamation: In the event the well is a dry hole, or at such time that all production ceases and the well has been plugged and abandoned, the Operator will perform final reclamation of the site. Final reclamation will consist of reclamation of the well. However it should be noted that the all the mine roads and well pad are on private land. The landowner, United States Gypsum Company and the operator have entered into an “Operating Agreement”. This operating agreement requires reclamation to be done in accordance with terms of the operating agreement.

Any accumulation of hydrocarbons in the production tanks will be removed and recovered for sale unless it is determined to be waste oil. All waste oil will be disposed of properly at approved facilities.

Road base material used in the pad will be removed from the site and disposed in a proper manner and in accordance with the Operating Agreement.

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The mine road which accesses the well pad will be used by United States Gypsum Company concurrently as agreed to in the "Operating Agreement."

Final reclamation will take place within 180 days after plugging date of the last well on the drill site, depending on weather, season and other extenuating circumstances.

During the life of the project and until the site is released from liability for reclamation, the project will be inspected at least annually for noxious weeds. If invasive noxious weeds are found, the weeds will be treated to eliminate further reproduction, and treatment shall continue until the weeds have been eradicated. If noxious weeds are found, SITLA will be notified of their occurrence.

Surface Ownership:

The surface of the proposed well site is owned by United States Gypsum Company. the mine road which accesses the well pad is owned by United States Gypsum Company.

Other Information:

Heavy equipment used to construct and rehabilitate the well pad will be cleaned and/or sprayed to remove any noxious or invasive weeds and seeds prior to entering to the project site. Any other equipment and vehicles that have been used in other locations where noxious weeds or seeds could have attached to the equipment will also be sprayed and/or cleaned.

All equipment and vehicles will be confined to the mine road which accesses the well pad.

United States Gypsum Company, during its surface mining permitting process, has a Class III cultural survey and has submitted the same under separate cover to the appropriate agencies.

No stream alteration or drainage crossings are involved that require additional State or Federal approval.

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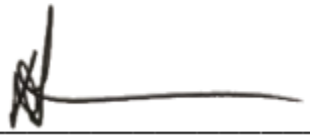
All permanent structures, including pumping units, constructed or installed will be painted a flat, non-reflective color. Permanent structures are defined as being on location for six months or longer. Facilities required to comply with Occupational Safety and Health Act (OSHA) shall be excluded.

Fire suppression equipment will be available to suppress any fires caused by construction or related activities. In the event of a fire the Richfield Interagency Fire Center (435) 896-8404 will be notified,

Operator Certification

I hereby certify that I, or someone under my direct supervision, have inspected the drill site and access route described herein: that I am familiar with the conditions which currently exist; that I, or someone under my direct supervision, has full knowledge of State and Federal laws applicable to this operation, that the statements made in this APD package are, to the best of my knowledge, true and correct and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

Executed this _1st_ day of _October_, 2014.

Signature: 

Print name: Douglas J. Isern

Position Title: President

Address: Trans-Western Petroleum LTD., Inc.
PO Box 276
Golden, CO 80402
Telephone: (303) 921-5532

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API Well Number: 43041500120000

H_2S Drilling Operations Plan

Operator:

Trans-Western Petroleum, LTD

Well Name:

Trans-Western Petroleum USG #2

Surface location:
Lot 6, NW ¼ - Section 23
Township 22 South - Range 01 West - SLB&M
Sevier County, Utah

Bottom-hole location:
Lot 12, NW ¼ - Section 23
Township 22 South – Range 01 West – SLB&M

GL Elevation: 5865 feet

P. O. Box 276
Golden, Colorado 80402

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Introduction

This H_2S contingency plan (R649-3-12-2) has been prepared for the Trans-Western Petroleum USG #2 well, which will be located on a fee lease in Section 23, T22S-R01W-SLB&M, Sevier County, Utah. This Plan is intended as a guide for personnel working at the well site should an accidental release of natural gas containing hydrogen sulfide occur during drilling or completion operations and is consistent with Utah regulations R649-3-12. Operational requirements include installation of gas monitors and safety equipment on the drill site, personnel training, and response procedures. Beginning at a drill depth of 5600 ft MD all personnel, including anyone who may travel to location on an unscheduled basis, must review and be familiar with onsite duties as well as the safety equipment involved. For the plan to be effective, the cooperation and participation of all personnel working at the well site is required.

Hydrocarbon gas with low concentrations of H_2S has been detected in the some wells drilled in the area.

1. At the Wolverine Covenant Field, a producing field located ~6 miles to the west by southwest of the proposed well, no indications of H_2S were encountered during the drilling of the field. Small concentrations of H_2S have been sampled while producing from the field.
2. At the Wolverine Carter Peak Federal 13-1 (Sec. 13-T22S-R1W), located ~1 mile to the west by northwest of the proposed well, no indications of H_2S were encountered during the drilling of the well. The well was plugged and abandoned as a dry hole so no production information exists.
3. At the Wolverine Arapien Valley 24-1, located ~13 miles to the north of the proposed well, H_2S was detected in gas samples from the upper Navajo at concentrations less than approximately 35 ppm (0.000035 mole volume) and in the lower Navajo at approximately 900 ppm (0.0009 mole volume).

Exposure to H_2S by the general public is very unlikely during drilling or completion operations. The prevailing wind direction is expected to be from the west when this well is drilled. The lands adjacent to the well site are owned by USG Corporation and are currently being used as a mining site. Lands to the north (Lots 1 - 4, Sec. 23-T22S-R1W) of the drill site are Federal owned. All these lands are unoccupied mining property and Federal land. Sage Flat Road (labeled Sage Flat Road on Google maps), a generally north/south trending county road in this area, cuts through Sections 13 and 24 about a mile east of the well site. Interstate 70 is north of the drill site and at its closest it is about 1.5 miles to the northwest. The center of Salina City is approximately 5.3 miles to the northeast of the drill site.

Even assuming a release of 2,000,000 cubic feet/day with a concentration of 0.0009 mole volume, the 100 ppm radius of exposure (as calculated in accordance with BLM Onshore Order No. 6) is 146' and the 500 ppm radius of exposure is 67', both of which would fall within or slightly off the edge of this irregular shaped well pad site. Access to the well pad will be restricted to essential personnel during drilling beneath 5600 feet

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MD (roughly 500 feet above the first potential sour gas producing zone, the Twin Creek formation).

Directions

Driving directions to location:

From 4 Way Stoplight At the Intersection of State & Main Streets in Salina turn West. From the town center of Salina City, head west on Main Street. Main Street turns southwest into Utah highway 24. Follow highway 24 for a few miles (2.1 miles from the stoplight) to the Sage Flat Road (some maps label the turn-off Lost Creek Road) turnoff on the left. Follow Sage Flat Road generally south, under Interstate 70 and 1.1 miles beyond the Interstate 70 overpass. Turn right onto a mine road. Follow the mine road roughly 3 miles west to a T intersection with another mine road. Turn left onto this 2nd mine road. Follow this 2nd mine road roughly 3-1/2 miles up the side of the mountain. The road dead-ends onto the well site (see the attached maps starting on page 24 – Attachments–Maps, diagrams). The top of Carter Peak is located roughly 1/2 mile south of the drill site.

I. Duties & Responsibilities

In order to assure proper execution of the contingency plan, it is essential that one person be responsible for and is vested with the requisite authority for implementing the procedures outlined in this plan. The order of responsibility will be as follows:

1. Trans-Western Wellsite Supervisor on location - if unable to perform his/her duties;

2. 1st alternate: Trans-Western representative - if unable to perform his/her duties;

3. 2nd alternate: Rig Supervisor/Toolpusher - if unable to perform his/her duties;

4. 3rd alternate: Safety consultant representative.

A. All Personnel

1. Always be alert for possible H_2S alarms - both audible and visual.

2. Be familiar with location of Safe Briefing Areas (SBA) and protective breathing equipment.

3. Develop “wind awareness”. Be aware of prevailing wind direction as well as nearby uphill areas should there be no wind.

4. Familiarize yourself with nearest escape routes for safe evacuation.

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5. Should H_2S alarm sound, DON'T PANIC - remain calm and follow instructions of person in charge. Generally speaking, all personnel are to go to the upwind SBA for further instructions. Watch the wind sock to determine the upwind direction.

6. If the H_2S alarms sound:

   a. Rig crew is to don masks, shut in the well and evacuate to the appropriate SBA for further instructions. Essential personnel shall evacuate to the appropriate SBA and be prepared to don the appropriate respiratory protective equipment and follow safety procedures. They will continue to wear respiratory protective equipment until the area is deemed safe (H_2S concentration less than 10 PPM).

   b. Non-essential personnel shall remain at the appropriate SBA using escape-breathing systems. They are to wait there for further instructions from the Trans-Western Wellsite Supervisor or the designated person in charge.

   c. Initiate rescue protocol if necessary and following training procedures.

B. Wellsite Supervisor

1. The Wellsite Supervisor will confirm that all personnel on location at any time are trained in H_2S safety and aware of above list of duties.

2. The Wellsite Supervisor will ensure that all personnel observe all safety and emergency procedures.

3. The Wellsite Supervisor will make an effort to keep the number of personnel on location to a minimum and to ensure that only essential personnel are on location during critical operations.

4. Should an extreme danger condition exist, the Wellsite Supervisor will:

   a. Assess the situation and advise all personnel by appropriate means of communication.

   b. Be responsible for determining that the extreme danger condition is warranted and have the red flag posted at location entrance.

   c. Go to safe briefing area. Give clear instructions relative to hazard on location and actions for personnel to follow.

   d. Notify company, USG and regulatory groups of current situation as required per company policy and regulatory protocol. Follow appropriate procedures for emergency services notification.

   e. Proceed to well and supervise operations with rig supervisor. Take action to control and reduce the H_2S hazard.

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f. Ensure that essential personnel are properly protected with supplied air breathing equipment and that non-essential personnel are in a “poison gas free” area.

g. Authorize evacuation of any persons/residents in area surrounding the well location.

h. Commence any ignition procedures if ignition criteria are met.

C. Rig Supervisor/Toolpusher

1. If the Wellsite Supervisor is unable to perform his/her duties and an alternate Trans-Western representative is also unable or unavailable to perform his/her duties, the rig supervisor will assume command of wellsite operations and all responsibilities listed above for Wellsite Supervisor.

2. The Rig Supervisor will ensure that all rig personnel are properly trained to work in H_2S environment, fully understand the purpose of H_2S alarms, and know actions to take when alarms activate. He/She will ensure that all crew personnel understand the buddy system, safe briefing areas, and individual duties as well as emergency evacuation procedures.

3. Should any extreme danger operational condition arise, the Rig Supervisor shall assist the Wellsite Supervisor by:

   a. Proceeding to the rig floor and assist in supervising rig operations.

   b. Ensuring that only essential working personnel remain in hazardous areas.

   c. Ensuring that all crewmembers that remain in hazardous area, wear respiratory protective equipment until notified that area is “clear” of any toxic gases.

   d. Assigning rig crewmember or other service representative to block entrance to location. No unauthorized personnel are to be allowed entry to location.

   e. Helping to determine hazardous “danger zones” on location using portable detection equipment, and positioning electric fans to move gas in any high concentration areas.

D. Safety Consultant

1. During normal operations (no H_2S present), the safety consultant will be responsible for the following:

   a. Ensuring that all wellsite safety equipment is in place and operational.

   b. Ensuring that all wellsite personnel are familiar with location safety layout and operation of all safety equipment.

   c. Assisting the Wellsite Supervisor in performing weekly H_2S drills for location personnel.

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2. When an operational condition is classified as extreme danger, the safety consultant will be responsible for the following:
   a. Accounting for all wellsite personnel.
   b. Assessing any injuries and directing first aid measures.
   c. Ensuring that all safety and monitoring equipment are functioning properly and available.
   d. Monitoring the safety of wellsite personnel.
   e. Maintaining close communication with the Wellsite Supervisor.
   f. Being prepared to assist Wellsite Supervisor with support for rig crew or other personnel using breathing equipment.
   g. Being prepared to assist the Wellsite Supervisor with emergency procedures including possible well ignition.
   h. Being prepared to assist with evacuation of any area residents or other personnel in the immediate area.

E. Drilling Manager

1. The Trans-Western Drilling Manager will be responsible for notifying and maintaining contact with the company Production Manager and/or other company supervisory personnel as required.

2. Maintaining communication with the Wellsite Supervisor and providing any other assistance that might be required.

3. Travelling to wellsite if appropriate

4. Assisting Wellsite Supervisor with all other notifications – including both company and regulatory.

II. Well Location Layout

A. Location

1. An attached well site diagram depicts location and rig orientation, prevailing wind direction, terrain of surrounding area, location of briefing areas, access roads, location of flare lines and pits, location of caution/danger signs, and location of wind indicators.
2. If practical, the drilling rig will be situated to allow for the prevailing winds to blow across the rig toward the circulation tanks or at right angles to the lines from the BOP stack to the circulation tanks or as near this configuration as possible.

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3. There is no practical way to build a 2nd road off this location. Since an alternate road is not practical, a clearly marked footpath to a safe area will be provided. The auxiliary escape route will be kept available and passable at all times when drilling below 5500' MD so that a shift in wind direction will not prevent escape from the location if an emergency should occur.
4. The entrance(s) to the location will be designed to be barricaded if necessary because of a hydrogen sulfide emergency condition.
5. A minimum of 2 safe briefing areas (SBA) will be designated for assembly of personnel during emergency conditions (R649-3-12-4). These will be located at least 200 feet from the wellbore and in such a location that at least one area will be upwind of the well at all times (R649-3-12-4.1). Upon recognition of an emergency situation, all personnel will be trained to assemble at the designated briefing area for instructions.
6. Smoking areas will be established and smoking will be allowed only at those established smoking areas.
7. Reliable 24-hour telephone communications will be available at the wellsite supervisor's office.
8. The drilling rig will have when drilling below 5500' MD a continuous electronic H_2S detection system that will be located to detect the presence of hydrogen sulfide in areas where it is most likely to appear on site. The sensor head locations will be: 1) rig floor by driller's console, 2) substructure area near the bell nipple, 3) the shale shaker, 4) the mud mixing area (R649-3-12-6). Additional sensors will be positioned at the discretion of the drilling foreman. At least 1 light and 1 siren will be placed on the rig to indicate the presence of hydrogen sulfide. The light and siren will be strategically placed to be visible to all personnel on the drill site.
9. Equipment to indicate wind direction will be installed at prominent locations and will be visible at all times during drilling operations (R649-3-12-7). At least 2 wind direction indicators (i.e. windsocks) will be placed at separate elevations (i.e. near ground level and rig floor height). At least 1 wind direction indicator will be clearly visible from all principal working areas at all times so that wind direction can be easily determined. In addition, a wind direction indicator will be provided at each of the two briefing areas if the other wind direction indicators on location are not visible from the briefing areas.
10. Operational danger or caution sign(s) will be displayed along all controlled accesses to the site (R649-3-12-8). The sign(s) will legible and large enough to be read by all persons entering the wellsite and be placed a minimum of 200 feet but not more than 500 feet from the wellsite and at a location which allows vehicles to turn around at a safe distance prior to reaching the site.
11. Protective safety equipment will be available for all essential personnel (R649-3-12-5 & 5.1). There will be five 30-minute SCBA and five air line breathing units with emergency escape cylinders located at the drilling floor or dog house, one SCBA and air line unit will be located in the derrick (for derrick man), one 30-minute SCBA per person will be located by the quarters of all personnel on location, and 30-minute SCBA and escape units will be distributed as needed near the shaker, mud tanks,

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and any other area where escape from an H_2S contaminated area could be difficult. A safety trailer containing the compressed breathing air will be located near the well site and air lines will be run from the safety trailer to where the air line breathing units are located.

III. Safety Procedures

A. Training

When this plan is in effect, all personnel who come onto the location must be properly trained in hydrogen sulfide, nitrogen and oxygen deficient atmospheres safety. The personnel shall carry documentation with them indicating that the training has occurred within the previous 12 months. All training will comply with federal and state regulatory guidelines. Training will include proper fit tests for respirators for all personnel in each work crew on location. There will be a training session that reviews this site specific H_2S plan and the H_2S PPE (if applicable) for all personnel in each work crew on location. While this plan is in effect, all personnel in each work crew must be clean shaven to achieve an air tight seal about the face and respirator. Training will also include weekly H_2S and well control drills. All training sessions and drills are to be recorded in the driller's log, as well as in the safety supervisor's logbook.

Training topics shall include at a minimum:

1. Hazards and characteristics of hydrogen sulfide, nitrogen, and oxygen deficient atmospheres and symptoms of exposure to these gases.
2. Proper use, care and limitations of respiratory protective equipment with hands-on practice.
3. Use of both fixed and portable toxic gas detection equipment.
4. Work practices to reduce chances for toxic gas exposure and procedures for confined space.
5. First aid for toxic gas exposure and resuscitation equipment.
6. The buddy system.
7. Emergency evacuation procedures.
8. A review of the contingency plan for the well.
9. Clean shaven policy

B. Operating Conditions

A three color- flag warning system will be used to notify personnel approaching the drill site as to operating conditions on the wellsite. This system is in compliance with BLM Onshore Order 6, complies with Utah regulation R649-3-12-8.1 & 8.2, and follows industry standards.

Green Flag - Potential Danger

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Yellow Flag - Moderate Danger

Red Flag- Extreme Danger - Do not approach if red flag is flying.

A red warning flag will be displayed when H_2S is detected in excess of 10 ppm at any detection point.

The operational danger or caution signs located near the entrance to the location will be painted a high visibility red, black and white, or yellow with black lettering. They will be legible and large enough to be read by all persons entering the wellsite and will read "DANGER – POISON GAS – HYDROGEN SULFIDE" and in small lettering "Do not approach if Red Flag is Flying".

All sign(s) and, when appropriate, flag(s) will be visible to all personnel approaching the location under normal lighting and weather conditions.

Location access will be monitored and controlled during "non-routine" operations such as perforating, pressurized pumping, and well testing of potential H_2S bearing formations. The number of personnel on location will be restricted to "essential" personnel only

C. Warning System Response and Evacuation Plan

When H_2S is detected in excess of 10 ppm at any detection point indicating that an extreme danger condition exists, all non-essential personnel will be moved to a safe area and essential personnel (i.e., those necessary to maintain control of the well) shall don a pressure-demand type protective breathing apparatus. Once accomplished, operations may proceed.

The prevailing wind is expected to be from the west when this well is drilled. The lands adjacent to the well site are owned by USG Corporation (leased by Trans-Western Petroleum, LTD) and are currently being used as a mining site. Lands to the north (Lots 1 - 4, Sec. 23-T22S-R1W) of the drill site are Federal owned. All these lands are unoccupied mining property and Federal land. Sage Flat Road (labeled Sage Flat Road on Google Maps), a generally north/south trending county road in this area, cuts through Sections 13 and 24 about a mile east of the well site. Interstate 70 is north of the drill site and at its closest it is about 1.5 miles to the northwest. The center of Salina City is approximately 5.3 miles to the northeast of the drill site.

If an H_2S emergency situation arises, the Wellsite Supervisor will contact local authorities and USG mine management to authorize and work in coordination with them to evacuate and restrict non-essential personnel from areas near the wellsite where H_2S

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concentration levels could potentially exceed 10 ppm. All associated regulatory agencies will then be notified as soon as possible.

D. Emergency Rescue Procedures

Well site personnel should not attempt emergency rescues unless they have been properly trained. A trained person who discovers another person overcome by hydrogen sulfide **should not attempt to rescue without donning the proper breathing equipment.** When making an emergency rescue always use the following procedures:

1. Don rescue breathing equipment before attempting to rescue someone.
2. Remove the victim from the contaminated area to an area free of gas by traveling upwind or cross wind. Be certain that you are in a safe area before removing your breathing equipment.
3. If the victim is not breathing, initiate mouth-to-mouth resuscitation immediately. Follow CPR guidelines and replace mouth-to-mouth with a bag mask resuscitator if available.
4. Treat the victim for shock, keeping the victim warm and calm. Never leave the victim alone.
5. Any personnel who experience hydrogen sulfide exposure must be taken to a hospital for examination and their supervisor notified of the incident.

IV. H_2S Safety Equipment on Well Location

Item	Amount	Description
1.	One (1)	Safety trailer with a cascade system of 10-300 cu. ft bottles of compressed breathing air complete with high-pressure regulators w/
2.	Sufficient to service the drilling rig	Low-pressure airline equipped with Hanson locking fittings. This airline will be rigged up with manifolds to supply breathing air to the rig floor, substructure, derrick, shale shaker area, and mud mixing areas.
3.	Twelve (12)	Scott 30-minute self-contained breathing apparatuses (SCBA).
4.	Twelve (12)	12 Scott air line work units with escape cylinder (Ska-Paks).

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5.	One (1)	4-channel continuous electronic H_2S monitors with audible and visual alarms. The set points for these alarms are 10 ppm for the low alarm and 15 ppm for the high alarm.
6.	One (1)	Portable hand operated pump type detection units with tubes for hydrogen sulfide and sulfur dioxide.
7.	One (1)	Oxygen resuscitator with spare oxygen cylinder (649-3-12-5.4).
8.	One (1)	Trauma first aid kit (649-3-12-5.3).
9.	One (1)	Stretcher (649-3-12-5.5).
10.	Three (3)	Windsocks.
11.	One (1)	Well condition sign with 3 flag system.
12.	Two (2)	Safe Briefing Area (SBA) signs.
13.	One (1)	Fire blanket.
14.	One (1)	Set air splint.
15.	One (1)	Electric explosion proof fan.
16.	One (1)	Chalk board with chalk or notepad with pencil.
17.	Two (2)	300 cu. ft. air bottles for the safe briefing area.
18.	Two (2)	30# fire extinguishers.
19.	Each crew member	Cell phone to communicate from a safe area.

V. Operating Procedures and Equipment

1. If zones containing in excess of 100 ppm of H_2S gas are encountered while drilling with air, gas, mist, other non-mud circulating mediums for aerated mud, the well will be killed with a water-based mud and mud will be used thereafter as the circulating medium for continued drilling.
2. A flare system will be designed and installed to safely gather and burn H_2S-bearing gas and it will be equipped with a suitable and safe means of ignition (R649-3-12-10). If noncombustible gas is to be flared, the system will have a supplemental fuel to maintain ignition.
3. Flare lines will be located as far from the operating site as feasible and in a manner to compensate for wind changes. The flare line(s) mouth(s) will be located not less than 150 feet from the wellbore (R649-3-12-10.1 & 10.2). Flare lines will be straight unless targeted with running tees.
4. If SO_2 is to be released as a result of flaring of H_2S, portable SO_2 detection equipment will be available for checking the SO_2 level in the flare impact area. There are no occupied or unoccupied buildings or gathering places anywhere near the well site.

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5. The choke manifold included as a component of the well control system will have at least one remote controlled choke with controls readily accessible to the drilling or other authorized personnel.
6. A mud-gas separator will be rigged up and manifolded to the choke and flare system (R649-3-12-10).
7. The drilling mud will be a water-based system maintained with a pH of 10 or greater. Corrosion inhibitor additives will be in the mud. Sufficient scavenger chemicals will be available on location and will be used to scavenge or neutralize any H_2S in the drilling fluid (R649-3-12-11). Mud weight will be maintained as needed to control pressure in any formations encountered.
8. All equipment that has potential for exposure to H_2S will be suitable for H_2S service. The casing head and spools, blowout preventer assembly, rotating head, kill lines, choke, choke manifold and lines, valves, mud-gas separator and other related equipment will have metallurgical standards conforming to NACE MR0175/ISO 15156. Elastomers, packing, and similar inner parts exposed to H_2S will be resistant at the maximum anticipated temperature of exposure. Drill strings, surface casing, intermediate casing, and BOP shear rams are exempt from these requirements.
9. All respiratory protective, H_2S detection, and other needed safety equipment will be in place and ready for use, and all rig crews and other service personnel will be trained in its use when this plan is effective.
10. There will be a continuous electronic H_2S detection system that will automatically activate visible and audible alarms if hydrogen sulfide is detected. The visible light will activate if 10 ppm H_2S is present. The audible siren will activate if 15 ppm H_2S or higher concentration is present. There will be at least four H_2S sensors in place on the drilling rig. Additional alarm lights & sirens may be added to ensure that all personnel on the drill site are able to notice the alarms at any time. All H_2S detection equipment will be calibrated as recommended by the manufacturer and calibration records will be maintained on location.
11. Both 30-minute self-contained breathing apparatuses (SCBA) and workline units with escape cylinders will be available on location. There will be sufficient numbers of this supplied air breathing equipment on location to ensure that all personnel on location have equipment available to them. All respiratory protective equipment will use nose cups to prevent fogging in temperatures below 32°F. Spectacle kits will be available for personnel that require corrective lenses when working under mask.
12. Chalk boards or note pads will be provided to be used for communication when wearing protective breathing apparatus (R649-3-12-5.2) or electronic voice-microphones will be available for essential personnel to use when working under mask to facilitate communication.
13. Additional breathing equipment will be provided for non routine operations that require additional service personnel on the well location to ensure that all personnel on the well location have a dedicated supplied air respirator.

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14. If natural ventilation is not adequate electric explosion-proof ventilating fans (bug blowers) will be available to provide air movement in enclosed areas where gas might accumulate (R649-3-12-9).
15. Any drill stem test performed on any formation potentially containing H_2S will be done with a minimal number of personnel at the drilling site as necessary to safely operate the test equipment. Any such drill-stem test will be conducted only during daylight hours and will be a closed chamber test with no fluids allowed to flow from surface.
16. Any production testing of an H_2S bearing formation will be done with proper wellhead and other equipment in place to allow a controlled test through separation equipment and flare as needed. Any such test would be conducted with monitoring and warning devises in place and proper safety equipment available.

VI. Well Ignition Procedures

If it should become apparent that an uncontrolled release of hydrogen sulfide to the atmosphere might endanger the health and safety of the public or well site personnel, the Wellsite Supervisor will make a decision to ignite the well. The following procedure should be followed before attempting to ignite the well.

A. Ignition equipment - The following equipment will be available for on-site for use by the ignition team.

1. Flare gun with flare shells
2. Two 250 ft. life lines with harnesses for emergency response procedures (R649-3-12-5.6).
3. One portable combustible gas meter
4. Self contained breathing apparatus (SCBA) for each member of the ignition team.

B. Ignition Procedures

1. The Wellsite Supervisor will ensure that well site personnel are evacuated to a safe area upwind of the well bore prior to any ignition action.
2. The Wellsite Supervisor and a designated partner “buddy” backed up by well site safety personnel will comprise the ignition team. All team members will be wearing 30 minute SCBAs.
3. The partner of the ignition team will carry a combustible gas/ hydrogen sulfide meter to continuously monitor the area in which they are working and define the perimeter of the gas cloud.
4. The Wellsite Supervisor will carry the flare gun and shells.
5. The ignition team will determine the hazardous area and establish safe working perimeters. Once this is identified the team will proceed upwind of the leak and fire into the area with flare gun. If trouble is encountered in trying to light the leak, retry

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to ignite by firing the flare shells at 45 and 90 angles to the gas source, but DO NOT approach closer to the leak.

6. After ignition, monitor for sulfur dioxide and work with the support group to restrict access to the contaminated area.

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VII. Residents – Public in Radius of Exposure

Exposure to H_2S by the general public is very unlikely during drilling or completion operations. The prevailing wind is expected to be from the west when this well is drilled. This is unoccupied, mountain terrain, an industrial mining site.

Even assuming a release of 2,000,000 cubic feet/day with a concentration of 0.009 mole volume, the 100 ppm radius of exposure (as calculated in accordance with BLM Onshore Order No. 6) is 146' and the 500 ppm radius of exposure is 67', both of which would fall within the actual well pad site or just off the edge of this irregular shaped pad; the well pad will have controlled access during drilling below 5500 feet MD.

VIII. Emergency Phone Directory

A. Trans-Western Petroleum, LTD

Bill Donovan (Drilling Engineer/Wellsite supervisor consultant)	Office 303-794-4838 Cell 720-351-7470
Jack Magill (Drilling Engineer/Wellsite supervisor Consultant)	Office 308-848-3279 Cell 303-868-6408
Doug Isern (Operations Manager – Trans-Western Petroleum)	Office 303-279-4567 Cell 303-921-5532

B. Emergency Services Phone List

1. Sevier Valley Medical Center - Richfield, UT 435-893-4100
2. Gunnison Valley Hospital, Sanpete County 435-528-7246
3. Ambulance Services – Sevier County, UT .....911 or 435-896-6471
4. Ambulance Services – Sanpete County, UT .....911 or 435-835-2191
5. Sheriff Department - Sevier County, UT .....911 or 435-896-6471
6. Sheriff Department – Sanpete County, UT .....911 or 435-835-2191
7. Highway Patrol - Utah.....800-222-0038
8. Fire Department - Sevier County .....911 or 435-896-6471
9. Leslie Peterson, BLM – Price, UT (cell phone) 435- 650-9136
10. Utah Division Oil, Gas & Mining - Salt Lake City, UT.....801- 538-5277

    The Salt Lake City office number does not always answer. Responsible individual(s) at UDOGM and his/her contact numbers will be listed on approved State permit. A copy of which will be at the rig in the possession of the Drilling Supervisor.

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11. Medical Helicopter - Air Med- Salt Lake City, UT .....800 - 453-0120
12. Utah OSHA (Mark LeBlanc) ……..801- 205-2373
24 hours 801- 530-6901 or 801- 530-6855

C. Hospital

The regional hospital for Sevier county is Sevier Valley Medical Center (~25 miles) located at 1000 North Main, Richfield, UT. A map and directions to the hospital can be found in Section X-Attachments.

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IX. Reference Material for Hydrogen Sulfide and Sulfur Dioxide

If gas should be produced, it could be a mixture of Carbon Dioxide, Hydrogen Sulfide, and Methane.

TOXICITY OF VARIOUS GASES

Common Name	Chemical Formula	Specific Gravity of Air=1	1 Threshold Limit	2 Hazardous Limit	3 Lethal Concern
Hydrogen Cyanide	HCN	0.94	10 ppm	150 ppm/hr	300 ppm
Hydrogen Sulfide	H_2S	1.18	10 ppm	250 ppm/hr	600 ppm
Sulfur Dioxide	SO_2	2.21	2 ppm	--------	1,000 ppm
Chloride	CL1	2.45	1 ppm	4 ppm/hr	1,000 ppm
Carbon Monoxide	CO	0.97	50 ppm	400 ppm/hr	1,000 ppm
Carbon Dioxide	CO_2	1.52	5,000 ppm	5%	10%
Methane	CH_4	0.55	90,000 ppm	Combustible Above 5% in Air	-------

1. **Threshold = Concentration at which it is believed that all workers may repeatedly be exposed, day after day, without adverse side effects.**

2. **Hazardous = Concentration that may cause death.**

3. **Lethal = Concentration that will cause death with short-term exposure.**

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HYDROGEN SULFIDE

GENERAL PROPERTIES

Hydrogen Sulfide itself is a colorless and transparent gas and is flammable. It is heavier than air and, hence, may accumulate in low places.

Although the slightest presence of H_2S in the air is normally detectable by its characteristic "Rotten Egg"odor, it is dangerous to rely on the odor as a means of detecting excessive concentrations because the sense of smell is rapidly lost allowing lethal concentrations to be accumulated without warning. The following table indicates the poisonous nature of Hydrogen Sulfide, which is more toxic than Carbon Monoxide.

COMMON NAMES: Sour Gas, Rotten Egg Gas, Sulphurated Hydrogen, Hydrogen sulfide, Stink Damp, H_2S, Acid Gas, Sweet Gas*

PHYSICAL-CHEMICAL PROPERTIES

Chemical Formula..... H_2S

1. Specific Gravity (Air = 1.000)..... 1.193 (@ 77°F)

2. Color ..... None

3. Odor..... Compared to Rotten Eggs

4. Odor Threshold ..... 0.13 part of 1 ppm

5. Corrosivity ..... Reacts with metals, plastics, tissues and nerves.

6. Solubility in Water ..... 4.0 to 1 in H2O @ 32°F
2.6 to 1 in H2O @ 68°F

7. Effects on Humans..... Olfactory nerves, respiratory nerves, irritates sensitive membranes in eyes, nose, and throat.

8. Vapor Pressure ..... 19.6 atmospheres at 25°C

9. Explosive Limits ..... 4.3% to 46% by volume in air.

10. Ignition Temperature……..…….18°F (Burns with a pale blue flame)

11. Molecular Weight……..34.08

12. Conversion Factors…….. 1 mg/1 of air = 717 ppm (at 25°C and 760 mm HG). 1 ppm = 0.00139 mg/1 of air.

13. pH……3 in water

*** H2S is a sweet tasting Gas, but often the word "tasting" is left out.**

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INDUSTRIAL OCCURRENCES

Hydrogen Sulfide exposures occur in certain processes in the petroleum industry, chemical plants, chemical laboratories, sulfur and gypsum mines, viscose rayon and rubber industries, tanneries, and in the manufacture of some chemicals, dyes, and pigments. It may be encountered in excavations in the swampy or filled ground. It is produced when sulfur-containing organic matter decomposes, and it can therefore be found in sewage or organic-waste treatment plants. A common sewer gas, it may find its way into utility manhole, particularly dangerous when encountered in tanks, vessels, and other enclosed spaces.

TOXIC PROPERTIES

Hydrogen Sulfide is an extremely toxic and irritating gas. Free Hydrogen Sulfide in the blood reduces its oxygen carrying capacity, thereby depressing the nervous system. Sufficiently high concentrations can cause blockage of the phrenic nerve, resulting in immediate collapse and death due to respiratory failure and asphyxiation.

Because Hydrogen Sulfide is oxidized quite rapidly to sulfates in the body, no permanent after effects occur in cases of recovery from acute exposures unless oxygen deprivation of the nervous system is prolonged. However, in cases of acute exposures, there is always the possibility that pulmonary edema may develop. It is also reported that symptoms such as nervousness, dry nonproductive coughing, nausea, headache, and insomnia, lasting up to about 3 days have occurred after acute exposures to Hydrogen Sulfide.

At low concentrations the predominant effect of Hydrogen Sulfide is on the eyes and respiratory tract. Eye irritation, conjunctivitis, pain, lacrimation, keratitis, and photophobia may persist for several days. Respiratory tract symptoms include coughing, painful breathing, and pain in the nose and throat.

There is no evidence that repeated exposures to Hydrogen Sulfide results in accumulative or systemic poisoning. Effects such as eye irritation, respiratory tract irritation, slow pulse rate, lassitude, digestive disturbances, and cold sweats may occur, but these symptoms disappear in a relatively short time after removal from the exposure. Repeated exposure to Hydrogen Sulfide does not appear to cause any increase or decrease in susceptibility to this gas.

The paralytic effect of Hydrogen Sulfide on the olfactory nerve is probably the most significant property of the gas. This paralysis may create a false sense of security. A worker can be overcome after the typical rotten-egg odor has disappeared. Rather than the characteristic Hydrogen Sulfide odor, some victims of sudden acute overexposure have reported a brief sickeningly sweet odor just prior to unconsciousness.

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Subjective olfactory responses to various concentrations of Hydrogen Sulfide may be summarized as follows:

0.02 ppm	**No odor**
0.13 ppm	**Minimal perceptible odor**
0.77 ppm	**Faint, but readily perceptible odor**
4.60 ppm	**Easily detectable, moderate odor**
27.0 ppm	**Strong, unpleasant odor, but not intolerable**

Physiological responses to various concentrations of Hydrogen Sulfide have been reported as follows:

10 ppm	**Beginning eye irritation**
50-100 ppm	**Slight conjunctivitis and respiratory tract irritation after 1 hour exposure**
100 ppm	**Coughing, eye irritation, loss of sense of smell after 2-15 minutes. Altered respiration, pain in the eyes, and drowsiness after 15-30 minutes, followed by throat irritation after 1 hour. Several hours[1] exposure results in gradual increase in severity of these symptoms and death may occur within the next 48 hours**
200-300 ppm	**Marked conjunctivitis and respiratory tract irritation after 1 hour exposure**
500-700 ppm	**Loss of consciousness and possibly death in 30 minutes**
700 ppm	**Rapid unconsciousness, cessation of respiration, and death**
1000-2000 ppm	**Unconsciousness at once, with early cessation of respiration and death in a few minutes. Death may occur even if individual is removed to fresh air at once.**

ACCEPTABLE CONCENTRATIONS

ACCEPTABLE EIGHT-HOUR TIME-WEIGHTED AVERAGE

To avoid discomfort, the Time-Weighted average concentration of Hydrogen Sulfide shall not exceed 10 ppm.

ACCEPTABLE CEILING CONCENTRATION

The acceptable concentration for protection of health for an eight-hour, f ive-day week shall be 20 ppm. Fluctuations are to occur below this concentration, not above.

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ACCEPTABLE MAXIMUM FOR PEAKS ABOVE ACCEPTABLE BASE LINE FOR CONTINUOUS EXPOSURE

A single-peak concentration not exceeding 50 ppm for a maximum of 10 minutes is allowable provided that the daily time-weighted average is not exceeded.

H_2S EQUIVALENTS

Parts per Million	Percents	Grains per 100 cu. Ft.
1	0.0001	0.055
10	0.001	0.55
18	0.0018	1.0
100	0.01	5.5
1000	0.1	55.5
10000	1.0	555.5

Grains per 100 cu. Ft. = % by volume Mole 636.4
1% by volume = 10,000 ppm

SULFUR DIOXIDE

Sulfur Dioxide (SO_2) is a colorless, transparent gas and is non-flammable.

Sulfur Dioxide is produced during the burning of H_2S. Although SO_2 is heavier than air, it will be picked up by a breeze and carried downwind at elevated temperatures. While Sulfur Dioxide is extremely irritating to the eyes and mucous membranes of the upper respiratory tract, it has exceptionally good warning powers in this respect.

CONCENTRATIONS		EFFECTS
%SO_2	ppm	
0.0002	2	Safe for eight (8) hour exposure
0.0005	5	Pungent odor - normally a person can detect SO_2 in this range.
0.0012	12	Throat irritation, coughing, constriction of the chest, tearing and smarting of the eyes.
0.015	150	So irritating that it can only be endured for a few minutes.
0.05	500	Causes a sense of suffocation, even with the first breath.

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PHYSICAL PROPERTIES AND CHARACTERISTICS

Chemical Formula.....SO_2

1. Specific Gravity 2.212

2. Color .....None

3. Flammable.....No

4. Odor.....Characteristic, pungent, gives ample warning of its presence.

5. Corrosivity .....Dry---not corrosive to ordinary metals. Wet---corrosive to most common metals.

6. Allowable Concentrations.....2 ppm (ACGIH and OSHA)

7. Effects on Humans.....Irritates eyes, throat and upper respiratory system

TOXIC PROPERTIES

Sulfur Dioxide is an irritating gas in its vapor form and the odor is so intensely irritating that concentrations of 3 to 5 parts per million in the air are readily detectable by the normal person. In higher concentrations, the severely irritating effect of the gas makes it unlikely that any person would be able to remain in a Sulfur Dioxide contaminated atmosphere unless they were unconscious or trapped.

Sulfur Dioxide gas is intensely irritating to the eyes, throat, and upper respiratory system. Inhalation of this gas in concentrations of 8 to 12 parts per million in air causes throat irritation, coughing, constriction of the chest, tearing and smarting of the eyes. 150 parts per million is so extremely irritating that it can be endured only for a few minutes. 500 parts per million is so acutely irritating to the upper respiratory tract that it causes a sense of suffocation, even with the first breath.

Out of numerous reported exposures to Sulfur Dioxide, there are few references that would indicate pneumonia as an after effect.

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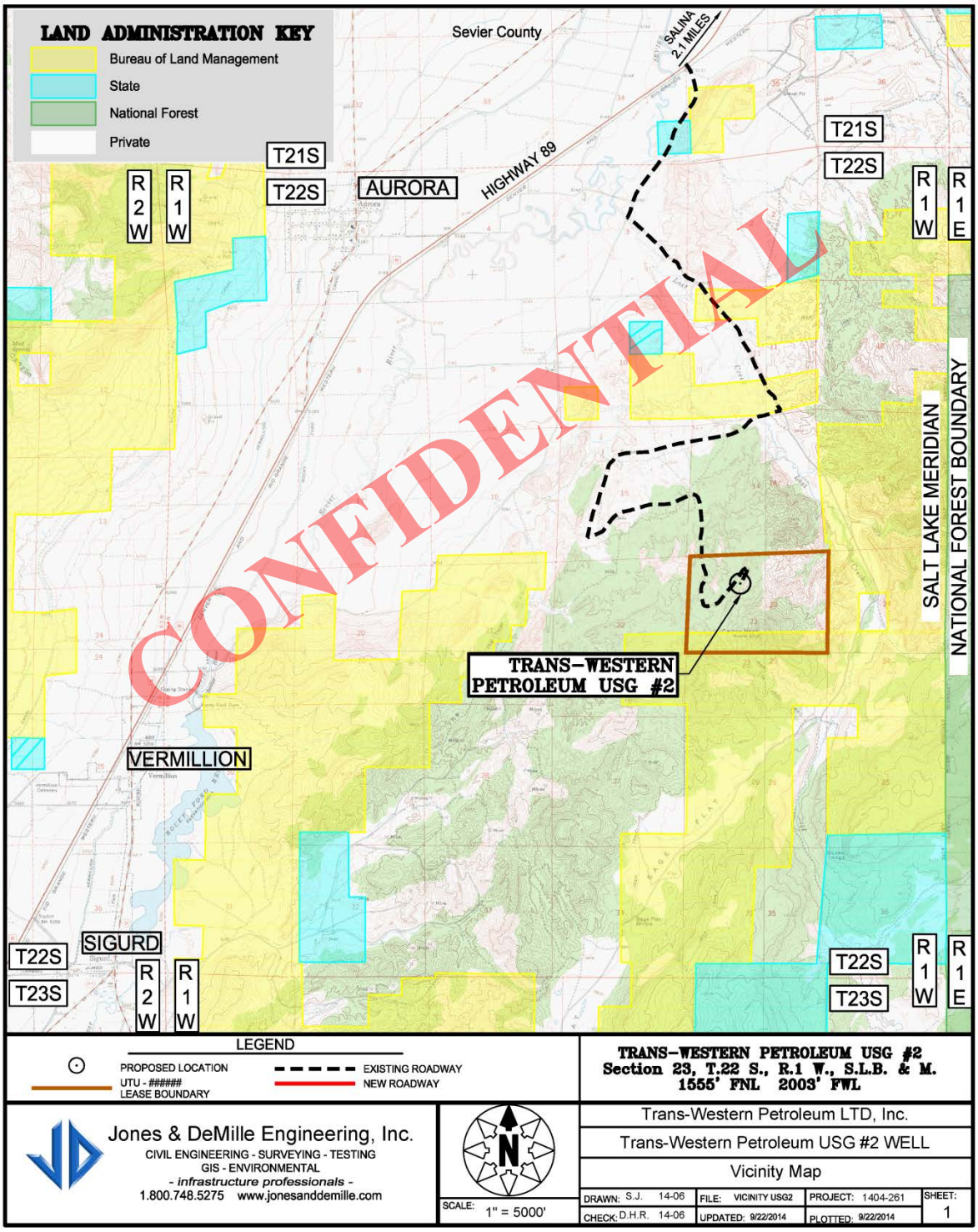
X. Attachments-Maps, Diagrams



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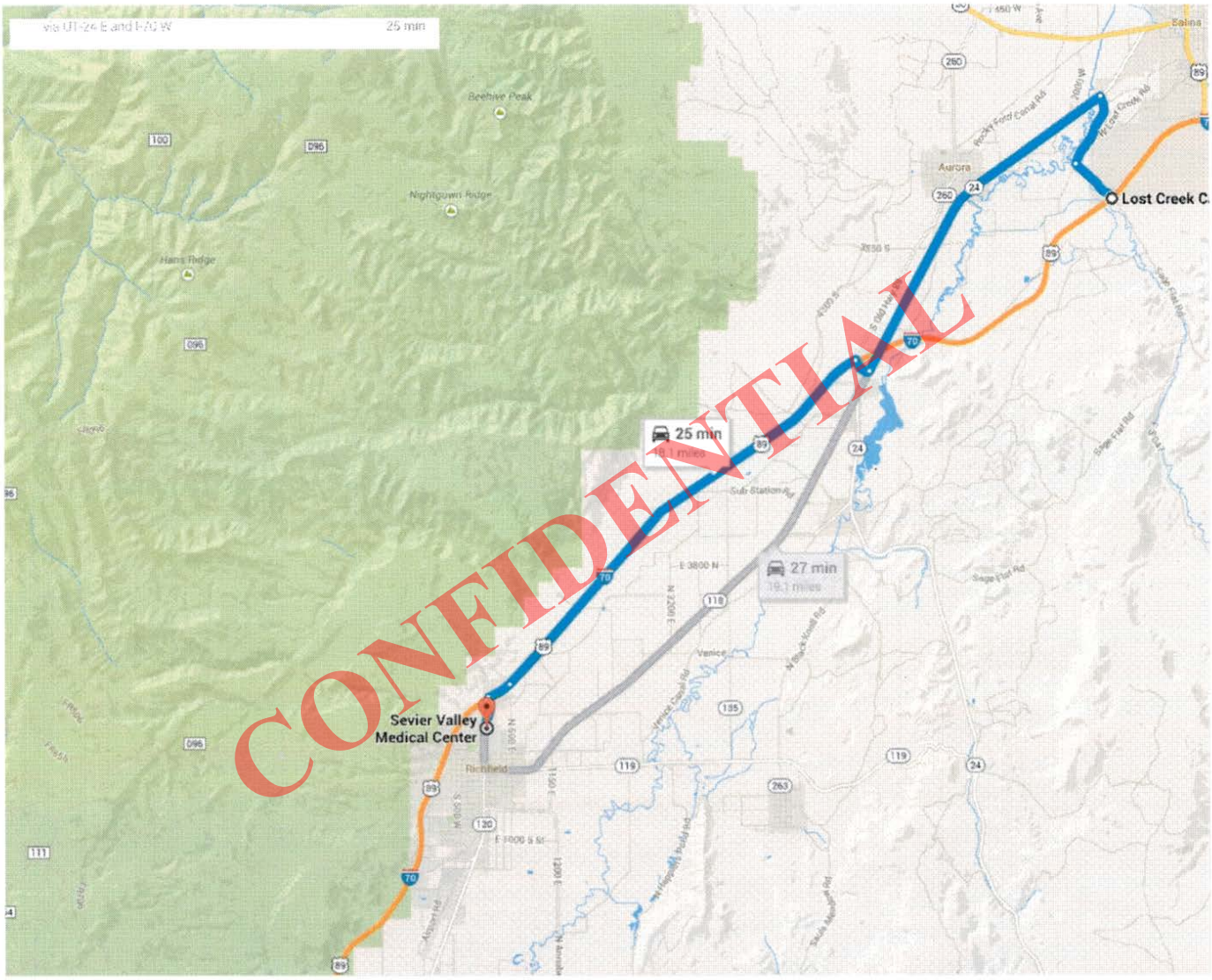
Google Maps



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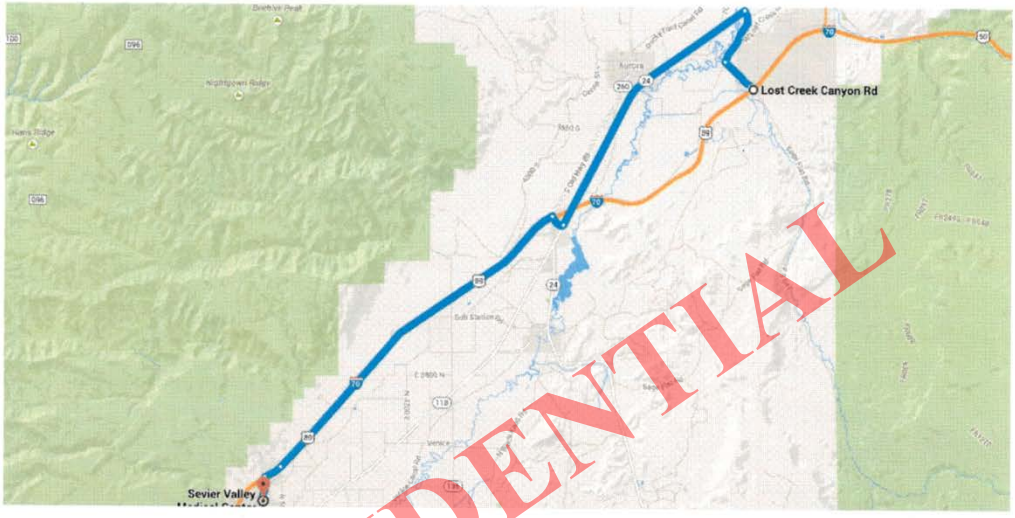
Google

Drive 18.1 miles, 25 min

Directions from **Lost Creek Canyon Rd** to **Sevier Valley Medical Center**

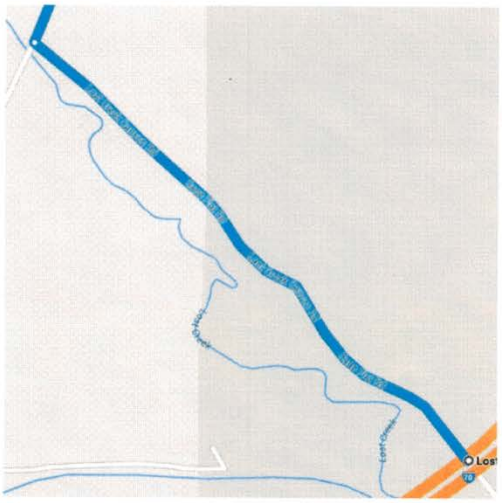


○ **Lost Creek Canyon Rd**
Salina, UT 84654

Follow **Sage Flat Rd** to **UT-24 E** in Salina
2.2 mi / 7 min

1. Head **northwest** on **Lost Creek Canyon Rd/Sage Flat Rd** toward **Lost Creek Rd**
0.9 mi

2. Turn **right** onto **Lost Creek Rd/Sage Flat Rd**
Continue to follow Sage Flat Rd
1.3 mi



Continue on **UT-24 E**. Take **I-70 W** to **E 1000 N/E 1100 N** in Richfield
15.9 mi / 17 min

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3. Turn **left** onto **UT-24 E**

6.3 mi

4. Turn **right** onto **UT-259 N**

0.3 mi

5. Turn **left** to merge onto **I-70 W** toward **Richfield**

8.2 mi

6. Take exit **40** toward **I-70 BUS/Richfield**

0.4 mi

7. Turn **left** onto **UT-120 S/N Main St**

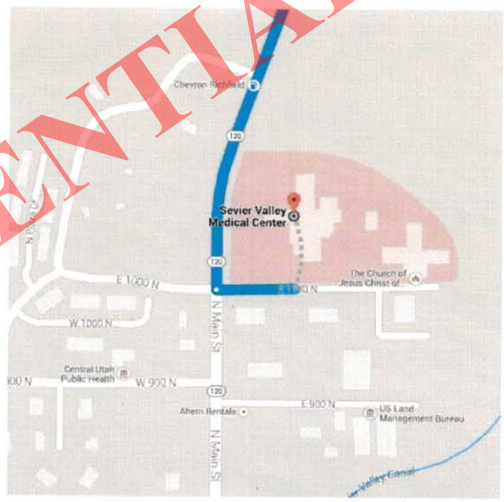
Continue to follow UT-120 S

0.6 mi

Take the 3rd **left** onto **E 1000 N/E 1100 N**

Destination will be on the left

289 ft / 55 s



Sevier Valley Medical Center

1000 North Main, Richfield, UT 84701

These directions are for planning purposes only. You may find that construction projects, traffic, weather, or other events may cause conditions to differ from the map results, and you should plan your route accordingly. You must obey all signs or notices regarding your route.

Map data ©2014 Google

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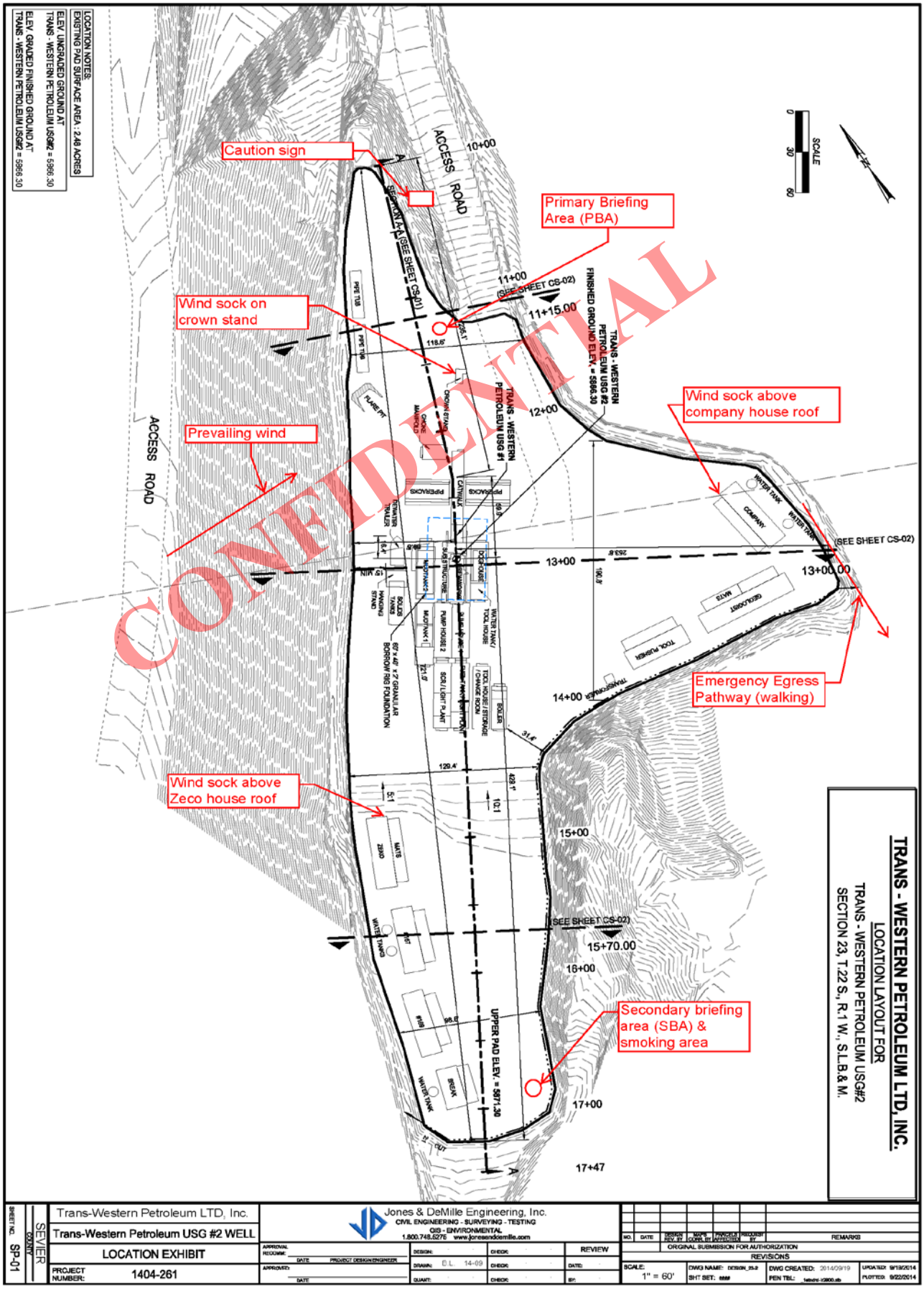
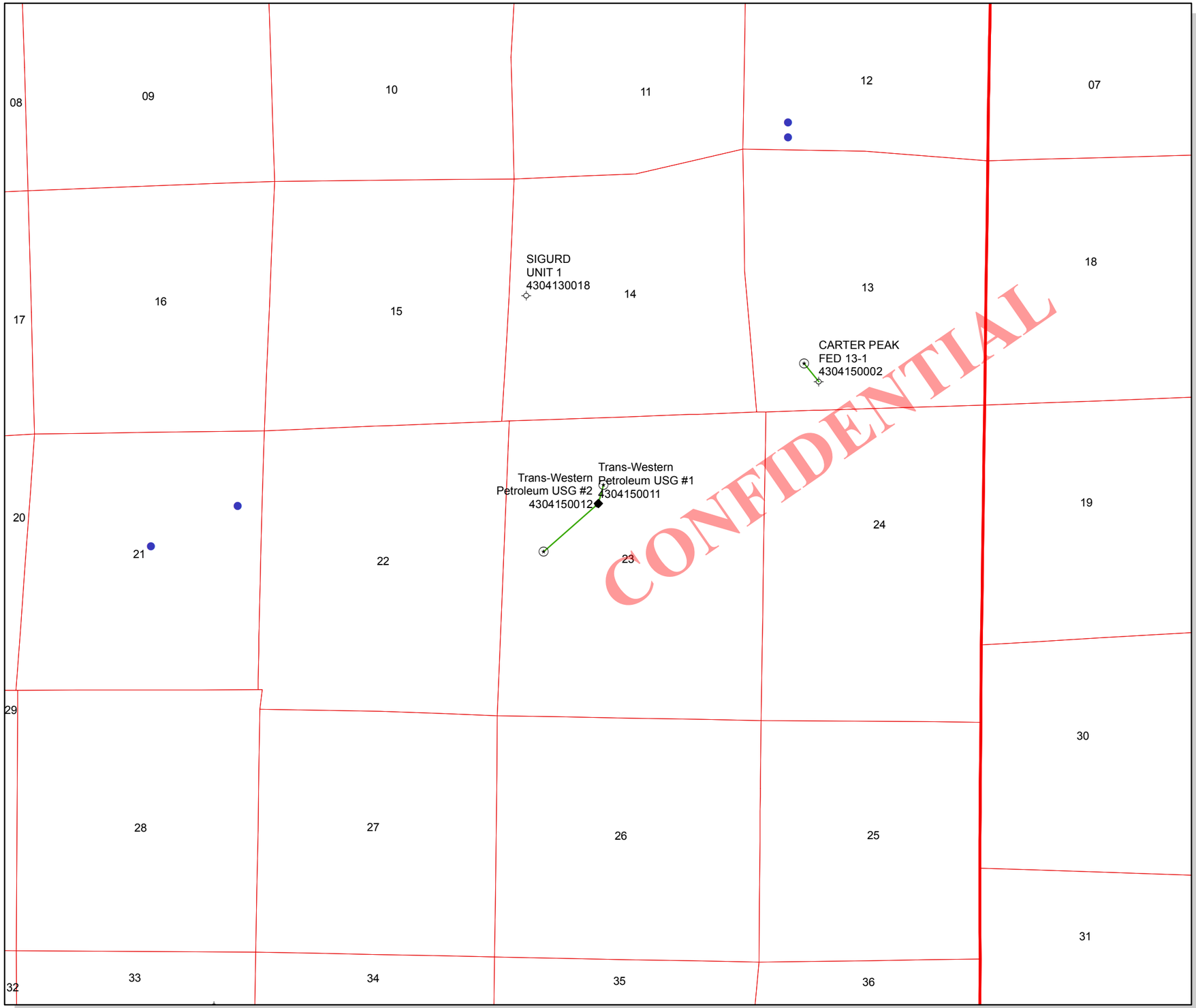
API Well Number: 43041500120000



API Well Number: 43041500120000



API Number:43-041-50012

Well Nm: Trans-Western Petroleum USG #2

Section: 23 Township: 22S Range: 1W Meridian: SL

Operator: TRANS-WESTERN PETROLEUM, LTD., INC.

Map Prepared: Oct. 11, 2014
Map Produced by Lisha Cordova

Wells Query
Status

- APD - Aproved Permit
- DRL - Spuded (Drilling Commenced)
- GIW - Gas Injection
- GS - Gas Storage
- LOC - New Location
- OPS - Operation Suspended
- PA - Plugged Abandoned
- PGW - Producing Gas Well
- POW - Producing Oil Well
- SGW - Shut-in Gas Well
- SOW - Shut-in Oil Well
- TA - Temp. Abandoned
- TW - Test Well
- WDW - Water Disposal
- WIW - Water Injection Well
- WSW - Water Supply Well

Units
STATUS

- ACTIVE
- EXPLORATORY
- GAS STORAGE
- NF PP OIL
- NF SECONDARY
- PI OIL
- PP GAS
- PP GEOTHERML
- PP OIL
- SECONDARY
- TERMINATED

Fields
STATUS

- Unknown
- ABANDONED
- ACTIVE
- COMBINED
- INACTIVE
- STORAGE
- TERMINATED

2,800 1,400 0 2,800 Feet

1:27,015

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TRANS - WESTERN PETROLEUM, LTD.

October 14, 2014

Diana Mason
Permitting-Petroleum Technician
Utah Division of Oil, Gas and Mining
P.O. Box 145801
Salt Lake City, Utah 84114-5801

Re: Application for Permit to Drill (Utah ePermit #10369)
Trans-Western Petroleum, Ltd.
Trans-Western Petroleum USG #2
Directional Drilling Letter

Dear Mrs. Mason:

Trans-Western Petroleum, Ltd., hereby submits this letter with attached plat as part of the *Application for Permit to Drill* (APD) for the referenced well:

- R649-3-11 Directional Drilling Application Plat showing proposed BHL

The City of Salina City (Water System 21014) will be the source for fresh water during drilling and completion operations on this proposed well. The Redmond Inc. mine at Redmond UT will be the source of brine water for drilling. The surface at the planned drill site is fee ownership.

This letter and the accompanying plat is intended to serve as an application for directionally drilling the well per Utah code R649-3-11. Trans-Western Petroleum is the owner of all oil and gas within 460 feet from all points along the intended wellbore for the well. Information relating to R649-3-11 is as follows:

Operator: Trans-Western Petroleum, Ltd.

Address: P.O. Box 276, Golden CO 80402

Well: Trans-Western Petroleum USG #2

Field: N/A (Wildcat)

Reservoir: N/A (Wildcat)

County: Sevier

Reason: Restrictive topography and to minimize surface impact

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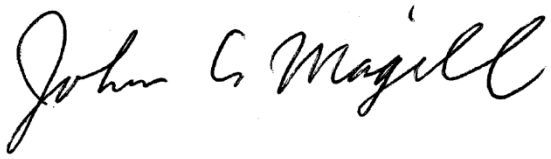
Please accept this letter as Trans-Western's written request for confidential treatment of all information contained in and relating to this application and proposed well.

Thank you for consideration of this application. Please feel free to contact me if ou have any questions or need additional information.

Sincerely,



John C. Magill, P.E.
Consulting Petroleum Engineer

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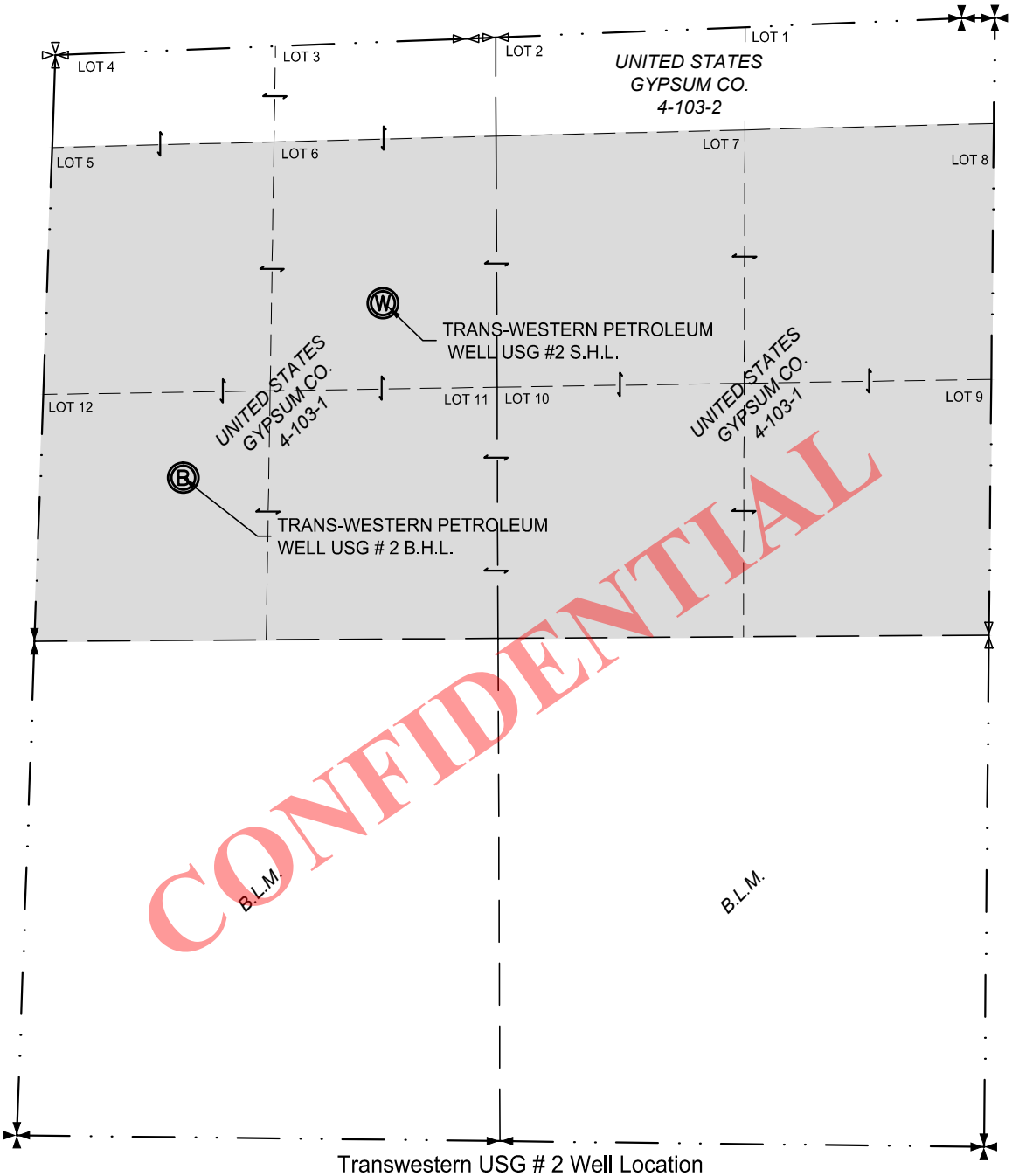

Transwestern USG # 2 Well Location

SHL: 2003' FWL AND 1555' FNL - LOT 6, SECTION 23, T.22 S., R.1 W., S.L.B. & M.
BHL: 852' FWL AND 2548' FNL - LOT 12, SECTION 23, T.22 S., R.1 W., S.L.B. & M.

LEGEND

= TRANS-WESTERN LEASE
W = PROPOSED SHL
B = PROPOSED BHL

1000' 500' 0' 1000'
SCALE

Jones & DeMille Engineering, Inc.
CIVIL ENGINEERING - SURVEYING - TESTING
GIS - ENVIRONMENTAL
- infrastructure professionals -
1.800.748.5275 www.jonesanddemille.com

SCALE: 1"=1000'

Sevier County | FIGURE: -
Directional Drilling Application Plat (R649-3-11)
Trans - Western Petroleum

DRAWN: TRG 101314	FILE:1404-261 USG 2 DDAP	PROJECT: 1404-261	SHEET: 1
CHECK: TRG 101314	UPDATED: 10/13/2014	PLOTTED: 10/13/2014	

RECEIVED: October 14, 2014

Diana Mason <dianawhitney@utah.gov>

Fwd: Comment for RDCC Project Numbers: 46112, 46113, & 46116

Lisha Cordova <lishacordova@utah.gov> Fri, Nov 7, 2014 at 12:47 PM
To: Brad Hill <bradhill@utah.gov>, Diana Mason <dianawhitney@utah.gov>

FYI....

RDCC Project Numbers:
46112 - 43-047-54773
46113 - 43-041-50012
46115 - 43-047-54797
46116 - 43-047-54796

---------- Forwarded message ----------
From: **Sindy Smith** <sindysmith@utah.gov>
Date: Fri, Nov 7, 2014 at 12:39 PM
Subject: Re: Comment for RDCC Project Numbers: 46112, 46113, & 46116
To: Lisha Cordova <lishacordova@utah.gov>

No comment.

On Fri, Nov 7, 2014 at 11:47 AM, Lisha Cordova <lishacordova@utah.gov> wrote:
> How about RDCC Project #46115?
>
> Thx.
>
> On Wed, Nov 5, 2014 at 9:27 AM, Sindy Smith <sindysmith@utah.gov> wrote:
> > Hi Lisha,
> >
> > Joel Karmazyn, Division of Air Quality, provided the same comment for the above-referenced RDCC Projects. I am sending you the comment *via* email rather than a formal letter because the comment is only one sentence and it is the same comment for all three projects:
> >
> > ***Please be aware that the Air Quality Board has enacted new oil and gas development rules (500 series rules).***
> >
> > Contact Joel at (801) 536-4423 if you have questions concerning his comment.
> >
> > Please contact me if you have other questions.
> >
> > Sindy
> >
> > --
> > *Sindy Smith*
> > RDCC Coordinator
> > Resource Development Coordinating Committee
> > Public Lands Policy Coordination Office
> > 801-537-9193
>
> --

Lisha Cordova, Env. Scientist
Division of Oil, Gas and Mining
1594 W. North Temple, Suite 1210
Salt Lake City, Utah 84116
T: 801-538-5296
C: 801-396-3902
lishacordova@utah.gov

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Sindy Smith
RDCC Coordinator
Resource Development Coordinating Committee
Public Lands Policy Coordination Office
801-537-9193

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Lisha Cordova, Env. Scientist
Division of Oil, Gas and Mining
1594 W. North Temple, Suite 1210
Salt Lake City, Utah 84116
T: 801-538-5296
C: 801-396-3902
lishacordova@utah.gov

API Well Number: 43041500120000

BOPE REVIEW TRANS-WESTERN PETROLEUM, LTD., INC. -Western Petroleum USG #2 43041500120000

Well Name	TRANS-WESTERN PETROLEUM, LTD., INC. Trans-Western Petroleum			
String	SURF	PROD		
Casing Size(")	9.625	5.500		
Setting Depth (TVD)	2000	7400		
Previous Shoe Setting Depth (TVD)	0	2000		
Max Mud Weight (ppg)	9.2	10.5		
BOPE Proposed (psi)	1000	3000		
Casing Internal Yield (psi)	2950	7740		
Operators Max Anticipated Pressure (psi)	4036	10.5		

Calculations	**SURF String**	**9.625**	"	
Max BHP (psi)	.052*Setting Depth*MW=	957		
			BOPE Adequate For Drilling And Setting Casing at Depth?	
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	717	YES	rotating head
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	517	YES	OK
			***Can Full Expected Pressure Be Held At Previous Shoe?**	
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=	517	NO	OK
Required Casing/BOPE Test Pressure=		2000	psi	
***Max Pressure Allowed @ Previous Casing Shoe=**		0	psi	*Assumes 1psi/ft frac gradient

Calculations	**PROD String**	**5.500**	"	
Max BHP (psi)	.052*Setting Depth*MW=	4040		
			BOPE Adequate For Drilling And Setting Casing at Depth?	
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	3152	NO	3M BOP, dbl ram, annular preventer, drilling spool
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	2412	YES	kill & choke lines
			***Can Full Expected Pressure Be Held At Previous Shoe?**	
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=	2852	NO	OK
Required Casing/BOPE Test Pressure=		3000	psi	
***Max Pressure Allowed @ Previous Casing Shoe=**		2000	psi	*Assumes 1psi/ft frac gradient

Calculations	**String**		"	
Max BHP (psi)	.052*Setting Depth*MW=			
			BOPE Adequate For Drilling And Setting Casing at Depth?	
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=		NO	
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=		NO	
			***Can Full Expected Pressure Be Held At Previous Shoe?**	
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=		NO	
Required Casing/BOPE Test Pressure=			psi	
***Max Pressure Allowed @ Previous Casing Shoe=**			psi	*Assumes 1psi/ft frac gradient

Calculations	**String**		"	
Max BHP (psi)	.052*Setting Depth*MW=			
			BOPE Adequate For Drilling And Setting Casing at Depth?	
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=		NO	
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=		NO	
			***Can Full Expected Pressure Be Held At Previous Shoe?**	
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=		NO	
Required Casing/BOPE Test Pressure=			psi	
***Max Pressure Allowed @ Previous Casing Shoe=**			psi	*Assumes 1psi/ft frac gradient

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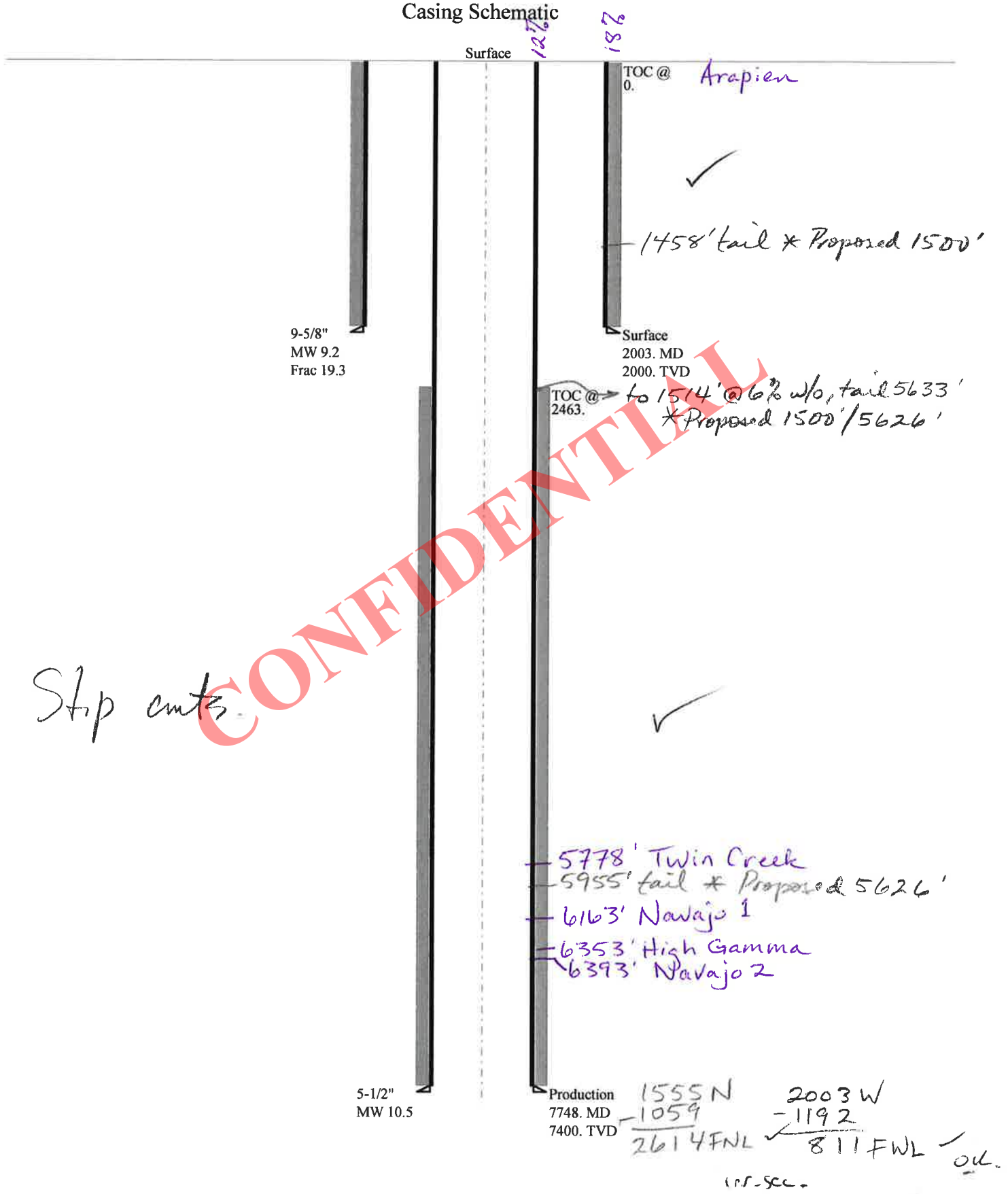
API Well Number: 43041500120000

43041500120000 Trans-Western Petroleum USG #2

Casing Schematic



API Well Number: 43041500120000

Well name:	**43041500120000 Trans-Western Petroleum USG #2**
Operator:	**TRANS-WESTERN PETROLEUM, LTD., INC**
String type:	Surface
Project ID:	43-041-50012
Location:	SEVIER COUNTY

Design parameters:

Collapse
Mud weight: 8.400 ppg
Design is based on evacuated pipe.

Burst
Max anticipated surface pressure: 1,760 psi
Internal gradient: 0.120 psi/ft
Calculated BHP 2,000 psi

No backup mud specified.

Minimum design factors:

Collapse:
Design factor 1.125

Burst:
Design factor 1.00

Tension:
8 Round STC: 1.80 (J)
8 Round LTC: 1.70 (J)
Buttress: 1.60 (J)
Premium: 1.50 (J)
Body yield: 1.50 (B)

Tension is based on buoyed weight.
Neutral point: 1,752 ft

Environment:
H2S considered? No
Surface temperature: 74 °F
Bottom hole temperature: 102 °F
Temperature gradient: 1.40 °F/100ft
Minimum section length: 100 ft

Cement top: Surface

Directional Info - Build & Hold
Kick-off point 1400 ft
Departure at shoe: 47 ft
Maximum dogleg: 1.5 °/100ft
Inclination at shoe: 9.04 °

Re subsequent strings:
Next setting depth: 7,400 ft
Next mud weight: 10.500 ppg
Next setting BHP: 4,036 psi
Fracture mud wt: 19.250 ppg
Fracture depth: 2,000 ft
Injection pressure: 2,000 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost ($)
1	2003	9.625	36.00	J-55	ST&C	2000	2003	8.796	17410

Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	873	1987	2.276	2000	3520	1.76	63.1	394	6.25 J

Prepared by: Helen Sadik-Macdonald
Div of Oil,Gas & Mining
Phone: 801 538-5357
FAX: 801-359-3940
Date: November 26,2014
Salt Lake City, Utah

Remarks:
Collapse is based on a vertical depth of 2000 ft, a mud weight of 8.4 ppg The casing is considered to be evacuated for collapse purposes.
Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.
Collapse strength is (biaxially) derated for doglegs in directional wells by multiplying the tensile stress by the cross section area to calculate a

Engineering responsibility for use of this design will be that of the purchaser.

API Well Number: 43041500120000

Well name:	**43041500120000 Trans-Western Petroleum USG #2**
Operator:	**TRANS-WESTERN PETROLEUM, LTD., INC**
String type:	Production
Project ID:	43-041-50012
Location:	SEVIER COUNTY

Design parameters:

Collapse
Mud weight: 10.500 ppg
Design is based on evacuated pipe.

Burst
Max anticipated surface pressure: 2,408 psi
Internal gradient: 0.220 psi/ft
Calculated BHP 4,036 psi

No backup mud specified.

Minimum design factors:

Collapse:
Design factor 1.125

Burst:
Design factor 1.00

Tension:
8 Round STC: 1.80 (J)
8 Round LTC: 1.80 (J)
Buttress: 1.60 (J)
Premium: 1.50 (J)
Body yield: 1.60 (B)

Tension is based on air weight.
Neutral point: 6,570 ft

Environment:
H2S considered? No
Surface temperature: 74 °F
Bottom hole temperature: 178 °F
Temperature gradient: 1.40 °F/100ft
Minimum section length: 1,000 ft

Cement top: 2,463 ft

Directional Info - Build & Hold
Kick-off point 1400 ft
Departure at shoe: 1580 ft
Maximum dogleg: 2.5 °/100ft
Inclination at shoe: 0 °

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost ($)
1	7748	5.5	17.00	L-80	LT&C	7400	7748	4.767	49091

Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	4036	6290	1.558	4036	7740	1.92	125.8	338	2.69 J

Prepared by: Helen Sadik-Macdonald
Div of Oil,Gas & Mining
Phone: 801 538-5357
FAX: 801-359-3940
Date: November 26,2014
Salt Lake City, Utah

Remarks:
Collapse is based on a vertical depth of 7400 ft, a mud weight of 10.5 ppg The casing is considered to be evacuated for collapse purposes.
Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.
Collapse strength is (biaxially) derated for doglegs in directional wells by multiplying the tensile stress by the cross section area to calculate a

Engineering responsibility for use of this design will be that of the purchaser.

ON-SITE PREDRILL EVALUATION
Utah Division of Oil, Gas and Mining

Operator TRANS-WESTERN PETROLEUM, LTD., INC.
Well Name Trans-Western Petroleum USG #2
API Number 43041500120000 **APD No** 10369 **Field/Unit** WILDCAT
Location: 1/4,1/4 NENW **Sec** 23 **Tw** 22.0S **Rng** 1.0W 1555 FNL 2003 FWL
GPS Coord (UTM) **Surface Owner** United States Gypsum Company

Participants

Ammon McDonald (DOGM)

Regional/Local Setting & Topography

The proposed location is on the western side of Carter Peak on the eastern edge of the Sevier Valley, within the overthrust belt of central Utah. This valley sits between the Pavant Range to the west and the Wasatch Plateau to the east. The location is currently part of the active USG gypsum mine; the surrounding area is used for cultivated fields, grazing, and raising livestock. Interstate-80 is approximately 1.6 miles to the west and the Sevier River is approximately 3 miles west. The area of the proposed pad is in steep topography but has been graded basically flat due to surface mining activities. Proposed location is approximately four miles southeast of the town of Aurora and 5.5 miles northeast of the town of Sigurd. Altitude of the site is approximately 5,865' above sea-level.

Surface Use Plan

Current Surface Use
Mining

New Road Miles	Well Pad	Src Const Material	Surface Formation
0	**Width** 100 **Length** 680	Onsite	ARAS

Ancillary Facilities

None, with the exception of trailers to be on location during drilling operations. Future plans for operational facilities to be built at a later date, dependent upon the success or failure of the well.

Waste Management Plan Adequate? Y

Environmental Parameters

Affected Floodplains and/or Wetlands N

Flora / Fauna

Flora - sagebrush, juniper, and pinions.

Fauna - coyote, rabbit, lizards & snakes

Soil Type and Characteristics

Semi-arid desert with shallow gypsum soil type derived from the erosion of the Arapien Shale.

Erosion Issues Y

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Flashflood storm events possible, use stormwater diversions to prevent pad erosion.

Sedimentation Issues

Site Stability Issues Y

Cut and fill required for pad construction due to steep topography. Adequate compaction methods should be used during construction.

Drainage Diverson Required? Y

Divert all drainages around pad to prevent storm event flooding and erosion.

Berm Required? Y

Berm location to prevent fluids from entering and/or leaving location.

Erosion Sedimentation Control Required? Y

Stormwater diversions.

Paleo Survey Run? N **Paleo Potental Observed?** Y **Cultural Survey Run?** N **Cultural Resources?** N

Reserve Pit

Site-Specific Factors		Site Ranking
Distance to Groundwater (feet)	100 to 200	5
Distance to Surface Water (feet)	>1000	0
Dist. Nearest Municipal Well (ft)	>5280	0
Distance to Other Wells (feet)	>1320	0
Native Soil Type	Low permeability	0
Fluid Type	Fresh Water	5
Drill Cuttings	Salt or Detrimental	10
Annual Precipitation (inches)	10 to 20	5
Affected Populations	>50	>50
Presence Nearby Utility Conduits	Unknown	10
	Final Score	45 1 Sensitivity Level

Characteristics / Requirements

N/A, closed-loop drilling program to be used.

Closed Loop Mud Required? Y **Liner Required?** **Liner Thickness** **Pit Underlayment Required?**

Other Observations / Comments

Fresh water source will be purchased from the City of Salina. Access to the site will be from State Route #89 to a mine road driveway designed and constructed by Sevier County and United States Gypsum Company. Road improvements will be done prior to drilling. Sevier County has yet to issue the required conditional use permits for drilling activities. There are no water wells within 1 mile of the proposed well location. The Sevier River is located approximately 3 miles to the west. There are two PA wells, API #4304130018 and API #4304150002, within one mile of the proposed well location. The town of Aurora is four miles northwest of the site and town of Sigurd is 5.5 miles southwest of the site; the rig lights and

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noise may be seen and heard from Aurora and/or Sigurd

Ammon McDonald	11/5/2014
Evaluator	**Date / Time**

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Application for Permit to Drill
Statement of Basis
Utah Division of Oil, Gas and Mining

APD No	API WellNo	Status	Well Type	Surf Owner	CBM
10369	43041500120000	LOCKED	OW	P	No
Operator	TRANS-WESTERN PETROLEUM, LTD., INC.		**Surface Owner-APD**	United States Gypsum Company	
Well Name	Trans-Western Petroleum USG #2		**Unit**		
Field	WILDCAT		**Type of Work**	DRILL	
Location	NENW 23 22S 1W S 1555 FNL 2003 FWL GPS Coord (UTM) 423695E 4303899N				

Geologic Statement of Basis

This location is in the High Plateaus section of the Colorado Plateau in west-central Utah. This area is characterized as being within the Basin & Range-Colorado Plateau physiographic transition zone. The proposed location is on fee mineral and fee surface a few miles east of the Sevier River. The well will be spud in the evaporite-rich Jurassic age Arapien Shale. The Trans-Western Petroleum proposes to use LSND fresh water mud while drilling the surface casing from 0'-2,003'. Any water contained within the Arapien Shale is likely to be of poor quality, due to the high TDS from the large quantities of gypsum and halite present in the shale. Within a mile of the proposed well location no underground water rights are on file. Two surface water rights, used for stock watering, on Lost Creek are to the north of the location. No documented USDW are present in the area from the Arapien Shale, Twin Creek Limestone, or Navajo Sandstone, and it is unlikely that any high quality groundwater will be encountered in these formations. The proposed mud, drilling, casing, and cementing programs should be sufficient to control and isolate the poor quality groundwater expected to be encountered at this location.

Ammon McDonald — **APD Evaluator**

11/5/2014 — **Date / Time**

Surface Statement of Basis

The USG #2 is located on the same well pad as the USG #1 (43-041-50011), which was on-sited on August 7th, 2014. This area is easily accessed off State Route 89 and USG mine road driveways. The proposed USG #2 well pad runs in a northeast to southwest direction and is located on the western side of Carter Peak, on the eastern edge of the Sevier Valley. The construction material needed for this location and the access road will be obtained from a local gravel pit and available onsite materials (waste rock from current surface mining activities). The pad is located is in steep topography but has been graded basically flat due to mining activities. The location will be bermed and water diversions will be constructed. Trans-Western Petroleum will use a closed-loop drilling program. All drill cuttings and drilling fluids will be hauled to an approved disposal site for waste management once the well is completed. The selected location for this well is suitable for drilling.

Ammon McDonald — **Onsite Evaluator**

11/5/2014 — **Date / Time**

Conditions of Approval / Application for Permit to Drill

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Category	Condition
Pits	A closed loop mud circulation system is required for this location.
Surface	The well site shall be bermed to prevent fluids from entering or leaving the pad.
Surface	Drainages adjacent to the proposed pad shall be diverted around the location.

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API Well Number: 43041500120000

WORKSHEET
APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 10/1/2014 **API NO. ASSIGNED:** 43041500120000

WELL NAME: Trans-Western Petroleum USG #2

OPERATOR: TRANS-WESTERN PETROLEUM, LTD., INC. (N4105) **PHONE NUMBER:** 308 848-3279

CONTACT: John C. Magill

PROPOSED LOCATION: NENW 23 220S 010W **Permit Tech Review:** ☑

SURFACE: 1555 FNL 2003 FWL **Engineering Review:** ☑

BOTTOM: 2548 FNL 0852 FWL **Geology Review:** ☑

COUNTY: SEVIER

LATITUDE: 38.88064 **LONGITUDE:** -111.87972

UTM SURF EASTINGS: 423695.00 **NORTHINGS:** 4303899.00

FIELD NAME: WILDCAT

LEASE TYPE: 4 - Fee

LEASE NUMBER: FEE **PROPOSED PRODUCING FORMATION(S):** NAVAJO

SURFACE OWNER: 4 - Fee **COALBED METHANE:** NO

RECEIVED AND/OR REVIEWED:

- ☑ **PLAT**
- ☑ **Bond:** STATE - 025934539
- ☐ **Potash**
- ☐ **Oil Shale 190-5**
- ☐ **Oil Shale 190-3**
- ☐ **Oil Shale 190-13**
- ☑ **Water Permit:** Salina City culinary
- ☑ **RDCC Review:** 2014-12-09 00:00:00.0
- ☑ **Fee Surface Agreement**
- ☐ **Intent to Commingle**

Commingling Approved

LOCATION AND SITING:

- ☐ **R649-2-3.**

Unit:

- ☑ **R649-3-2. General**
- ☑ **R649-3-3. Exception**
- ☑ **Drilling Unit**

Board Cause No: R649-3-11

Effective Date:

Siting:

- ☑ **R649-3-11. Directional Drill**

Comments: Presite Completed

Stipulations:

1 - Exception Location - bhill
5 - Statement of Basis - bhill
12 - Cement Volume (3) - hmacdonald
15 - Directional - bhill
23 - Spacing - bhill
25 - Surface Casing - hmacdonald

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GARY R. HERBERT
Governor
SPENCER J. COX
Lieutenant Governor

State of Utah
DEPARTMENT OF NATURAL RESOURCES
MICHAEL R. STYLER
Executive Director
Division of Oil, Gas and Mining
JOHN R. BAZA
Division Director

Permit To Drill
****

Well Name: Trans-Western Petroleum USG #2
API Well Number: 43041500120000
Lease Number: FEE
Surface Owner: FEE (PRIVATE)
Approval Date: 12/11/2014

Issued to:
TRANS-WESTERN PETROLEUM, LTD., INC., P.O. Box 276, Golden, CO 80402

Authority:
Pursuant to Utah Code Ann. 40-6-1 et seq., and Utah Administrative Code R649-3-1 et seq., the Utah Division of Oil, Gas and Mining issues conditions of approval, and permit to drill the listed well. This permit is issued in accordance with the requirements of R649-3-11. The expected producing formation or pool is the NAVAJO Formation(s), completion into any other zones will require filing a Sundry Notice (Form 9). Completion and commingling of more than one pool will require approval in accordance with R649-3-22.

Duration:
This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date

Exception Location:
Appropriate information has been submitted to DOGM and administrative approval of the requested exception location is hereby granted.

General:
Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

Conditions of Approval:
In accordance with Utah Admin. R.649-3-11, Directional Drilling, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.

This proposed well is located in an area for which drilling units (well spacing patterns) have not been established through an order of the Board of Oil, Gas and Mining (the “Board”). In order to avoid the possibility of waste or injury to correlative rights, the operator is requested, once the well has been drilled, completed, and has produced, to analyze geological and engineering data generated therefrom, as well as any similar data from surrounding areas if available. As soon as is practicable after completion of its analysis, and if the analysis suggests an

area larger than the quarter-quarter section upon which the well is located is being drained, the operator is requested to seek an appropriate order from the Board establishing drilling and spacing units in conformance with such analysis by filing a Request for Agency Action with the Board.

Compliance with the Conditions of Approval/Application for Permit to Drill outlined in the Statement of Basis (copy attached).

Cement volume for the 5 1/2" production string shall be determined from actual hole diameter in order to place lead cement from the pipe setting depth back to 1500' MD and tail cement to above the Twin Creek as indicated in the submitted drilling plan.

Surface casing shall be cemented to the surface.

Additional Approvals:
The operator is required to obtain approval from the Division of Oil, Gas and mining before performing any of the following actions during the drilling of this well:

- Any changes to the approved drilling plan - contact Dustin Doucet
- Significant plug back of the well - contact Dustin Doucet
- Plug and abandonment of the well - contact Dustin Doucet

Notification Requirements:
The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

- Within 24 hours following the spudding of the well - contact Carol Daniels
  OR
  submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas website
  at http://oilgas.ogm.utah.gov
- 24 hours prior to testing blowout prevention equipment - contact Dan Jarvis
- 24 hours prior to cementing or testing casing - contact Dan Jarvis
- Within 24 hours of making any emergency changes to the approved drilling program
  - contact Dustin Doucet
- 24 hours prior to commencing operations to plug and abandon the well - contact Dan Jarvis

Contact Information:
The following are Division of Oil, Gas and Mining contacts and their telephone numbers (please leave a voicemail message if the person is not available to take the call):

- Carol Daniels 801-538-5284 - office
- Dustin Doucet 801-538-5281 - office
  801-733-0983 - after office hours
- Dan Jarvis 801-538-5338 - office
  801-231-8956 - after office hours

Reporting Requirements:
All reports, forms and submittals as required by the Utah Oil and Gas Conservation General Rules will be promptly filed with the Division of Oil, Gas and Mining,

including but not limited to:

- Entity Action Form (Form 6) - due within 5 days of spudding the well
- Monthly Status Report (Form 9) - due by 5th day of the following calendar month
- Requests to Change Plans (Form 9) - due prior to implementation
- Written Notice of Emergency Changes (Form 9) - due within 5 days
- Notice of Operations Suspension or Resumption (Form 9) - due prior to implementation
- Report of Water Encountered (Form 7) - due within 30 days after completion
- Well Completion Report (Form 8) - due within 30 days after completion or plugging

Approved By:

For John Rogers
Associate Director, Oil & Gas

GARY R. HERBERT
Governor
SPENCER J. COX
Lieutenant Governor

State of Utah
DEPARTMENT OF NATURAL RESOURCES
MICHAEL R. STYLER
Executive Director
Division of Oil, Gas and Mining
JOHN R. BAZA
Division Director

June 4, 2015

John Magill
Trans-Western Petroleum, LTD., Inc.
P.O. Box 276
Golden, CO 80402

Re: APD Rescinded – Trans-Western Petro. USG #2, Sec. 23, T. 22S, R. 1W
Sevier County, Utah API No. 43-041-50012

Dear Mr. Magill:

The Application for Permit to Drill (APD) for the subject well was approved by the Division of Oil, Gas and Mining (Division) on December 11, 2014. On June 1, 2015, you requested that the division rescind the state approved APD. No drilling activity at this location has been reported to the division. Therefore, approval to drill the well is hereby rescinded, effective June 1, 2015.

A new APD must be filed with this office for approval prior to the commencement of any future work on the subject location.

If any previously unreported operations have been performed on this well location, it is imperative that you notify the Division immediately.

Sincerely,

Diana Mason
Environmental Scientist

cc: Well File
Brad Hill, Technical Service Manager

1594 West North Temple, Suite 1210, PO Box 145801, Salt Lake City, UT 84114-5801
telephone (801) 538-5340 • facsimile (801) 359-3940 • TTY (801) 538-7458 • *www.ogm.utah.gov*

UTAH DNR
OIL, GAS & MINING

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

5.LEASE DESIGNATION AND SERIAL NUMBER: FEE

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7.UNIT or CA AGREEMENT NAME:

1. TYPE OF WELL
Oil Well

8. WELL NAME and NUMBER:
Trans-Western Petroleum USG #2

2. NAME OF OPERATOR:
TRANS-WESTERN PETROLEUM, LTD., INC.

9. API NUMBER:
43041500120000

3. ADDRESS OF OPERATOR:
P.O. Box 276 , Golden, CO, 80402

PHONE NUMBER:
303 279-4567 Ext

9. FIELD and POOL or WILDCAT:
WILDCAT

4. LOCATION OF WELL
FOOTAGES AT SURFACE:
1555 FNL 2003 FWL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:
Qtr/Qtr: NENW Section: 23 Township: 22.0S Range: 01.0W Meridian: S

COUNTY:
SEVIER

STATE:
UTAH

11.
CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☐ NOTICE OF INTENT Approximate date work will start:	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
☐	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
✓ SUBSEQUENT REPORT Date of Work Completion: 6/1/2015	✓ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
☐ SPUD REPORT Date of Spud:	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
☐ DRILLING REPORT Report Date:	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

RESCIND PERMIT AND ABANDON LOCATION. NO WORK DONE OR MATERIALS PLACED ON LOCATION. This permitted well was not drilled and there are no plans to drill the well. Well site reclaimed as it is the same well site as the Trans-Western Petroleum #1 which is plugged and abandoned.

Accepted by the
Utah Division of
Oil, Gas and Mining
FOR RECORD ONLY
June 04, 2015

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
John C. Magill	308 848-3279	Consulting Engineer
SIGNATURE		**DATE**
N/A		6/1/2015

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